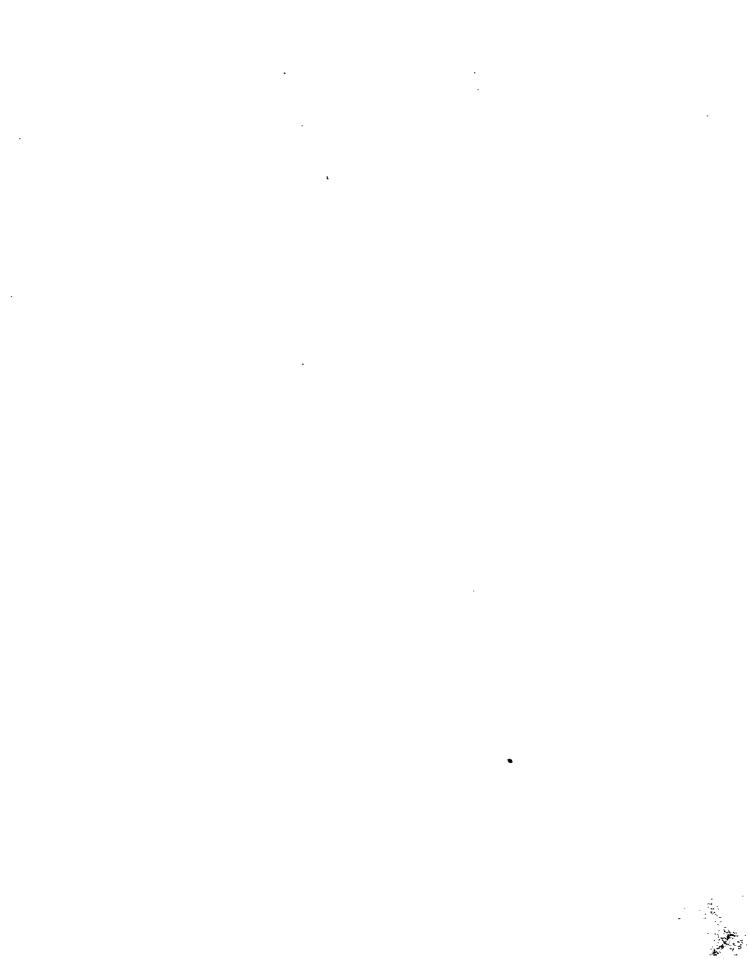
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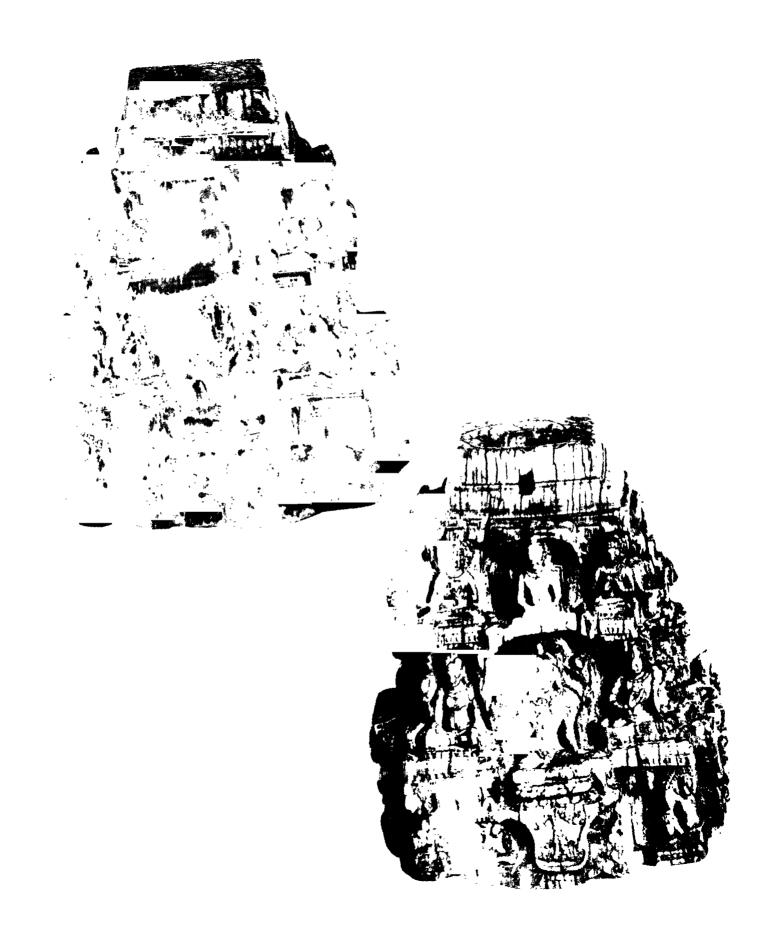
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V ol. XVII. CONTENTS			1949
Sherman E. Lee	An Early Pāla Ivory	•••	1
W. Norman Brown	The Jaina Tample room in the Metropoli	tan	
	Museum of Art	•••	6
Betty Heimann	Concept of Deva in Hindu Thought	•••	22
Alice Boner	The Symbolic Aspect of Form	•••	42
John Irwin	The Commercial Embroidery of Gujarat in	1	
	the Seventeenth Century	•••	51
Benoy Ghose	Primitive Indian Architecture	•••	57
j. Le Roy Davidson	Buddhist Paradise Cults in Sixth Century Ch	ina	112

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AN EARLY PALA IVORY

by SHERMAN E. LEE

Until the finds of Hackin at Begram, the Sanchi inscription referring to the ivory carvers of Vidiśā could have only a dream existence, a reference tempting yet aggravating to the imagination. The wealth of the Begram finds underlined the importance of media other than stone in the early art of India and one of the most precious of these media must have been ivory. Accustomed as we were to the horrors of the recent ivory "curious" from the bazaars of the East, it came as a pleasant awakening to find these precious remanants of a once great art. The late Andhra ivory found at Pompeii added yet another fragment to the reality slowly appearing before us and also served to excite our wonder at the location of the find. Was it a precious gift or a common article of trade? The nature of the material itself should serve to answer the question for ivory has traditionally been coupled with gold, silver and precious stones as Oriental treasure fit for the bounty or ransom of a king.

The ivories of Begram and Pompeii are especially rewarding aesthetically since the medium itself lends its nature wholeheartedly to the sensuous spirituality of Indian art. The color and texture of the tusk adorn the carver's skill, aiding and abetting him to his goal more easily than the relatively unyielding stone. Only the best of the Indian sandstones and the greenish whitish marble like limestone of Amaravati approach the appeal of ivory as a material.

Between these very early ivories of the Andhra period and the later medieval productions of Rajput and Mughal India there exists a vacuum, unfilled so far as the writer knows, with any acceptable figural ivory, however small, save the chessman from the treasury of Charlemagne, presumably a work of the late eighth or early ninth century. The ivory we now discuss seems to mark the second intrusion into this vacuum. Luckily the intrusion is no mere fragment, but a relatively complete and monumental work of art on a miniature scale compatible with the medium.

This ivory (Pls. I-II), now in the Seattle Art Museum, is conceived as an architectural form, a three-tiered stūpa with a modified cruciform cross-

section. The top is flat, a platform now empty, but with a square cut hole indicating former occupancy. This architecture, originally complete with columns, canopies, thrones and niches, is adorned with no less than fifty three figures, sixteen of them in animal form, the balance being various images in the Buddhist cosmogony. The compositional scheme is basically simple, but repeated until it appears complex.

The uppermost tier which we shall call the first zone consists of three Buddha images on each of the four sides. The central image on each side is slightly larger than the others and is further distinguished by a rectangular throne in addition to the circular halo. The second zone is somewhat more complicated and has three bejewelled images of male (or female) Bodhisattvas on each side. The central images, all masculine, are much larger than the side images and in addition are placed on a projecting and slightly depressed square backed throne with (originally) two standing attendants holding fly whisks. The third zone is still more complicated and consists of three units: the corners, supported by powerful dwarf-like figures; the centers or throne bases, on two sides, lion thrones with two small dwarfs above, on the other two sides, lotus thrones with dancing dwarfs for support and two small lions above; the spaces between center and corner, deeply recessed and each containing a supporting elephant indicated by trunk, head and ears only and these seen frontally. Each zone is separated from its companion by a simple beaded border which is also the characteristic ornament of halo and throne. The two columns remaining have capitals and bases and are of two types; one plain, the other ringed. Each of the four principal Bodhisattvas has a large lotus of varying form over and behind his left shoulder.

The material itself is of interest. The color varies from a rich deep brown of great depth and beauty to a creamy white. One side is somewhat discolored and has a chalky cast. The surface is covered with vertical cracks none of which is wide enough to disfigure the carving. The base shows wider cracks in a moderately ringed conformation radiating from the center, almost exactly similar to that of the Charlemagne ivory. In nearly all the faces of the images the ivory is worn from rubbing. Examination of the ivory under ultraviolet light reveals some of the damages and breakages to be quite old while a few are more fluorescent and appear to be of recent origin.

The material and descriptive factors having been disposed of, we are



now free to examine the heart of the matter. First, what is the meaning of this work of art? Second, what is its date and provenance? Because of the large number of figures involved we have used a bird's eve diagram (Pl. III) for explanation. The hand gestures, poses and other iconographical data for each image are indicated. In comparing these with available information we are able to identify most of the images as shown on the diagram.⁵ The identity of the small Buddha images on either side of the Dhyani Buddhas is questionable. There are two evident possibilities: the seven Mānusī, Buddhas and Maitreya, or Eight Scenes from the Life of Sakyamuni Buddha. Since the one figure without a halo in this group of eight appears to have a Naga hood behind, it would seem possible that we have here the episode of the Buddha sheltered by the Naga King rather than a representation of Maitreya. The other figures are in mudras that can be equated with the seven other scenes and since the symbolic representation of these scenes by an apparently uniform series of seated figures is not uncommon in the black stone images and bronzes of Bengal, we have tentatively identified these eight figures with the Eight Scenes. The dating suggested below would seem to confirm this guess. Of the eight principal images there is no doubt.

The lowest zone, complicated and with the animal or animal-like forms, represents the carnal or material world supported at the corners by "Atlantes", old earth deities (yakṣas) in grotesque form. The second zone, simpler, but bejewelled, is "between Heaven and Earth", the realm of the Bodhisattva. The first zone, simplest of all, is the realm of the Dhyānī Buddhas in Heaven or Paradise. The three-fold division is that of Dante's Commedia as well as that of Buddhism or Hinduism. The maṇḍala is not only organized vertically, but horizontally in the four directions, the cardinal points of the compass. In style as well each of the zones obeys its law of being. In the lowest zone, the dancing figures writhe, the lions snarl; in the middle, the Bodhisattvas bend gracefully and compassionately: while above, the Buddhas display their hieratic and formal images. We have then a marvellous parallel to such an edifice as Borobudur in Java.' Our ivory is a true microcosm, a world mandala in miniature.

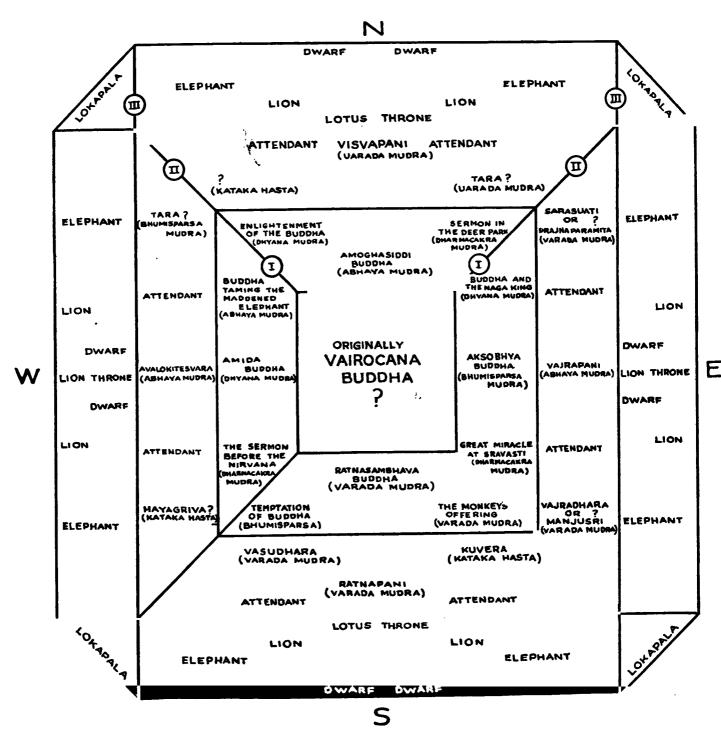
What of the top platform? The analogy with Borobudur aids us, for there, as in other mandalas of Mahāyāna Buddhism, is the realm of essence itself, the Supreme Buddha, Vairocana. We can not prove He occupied the platform but it would appear likely. Nearly all fifty-three

figures fulfil the meaning of the puzzle and we may be excused for filling in the missing space with an imaginary but congruent shape.

The second question does not admit of so dogmatic an answer as the first. In style these figures are full of a lissom grace, their forms are rounded and pliant, their expressions are serene and with a smiling grace. There is no mistaking the origins of the style in the fully developed Gupta style of the sixth century A. D. However, it is a truism that the Gupta style persisted with only slight modification in the early Pāla period of Bengal and with slighter change in the ninth and earth century art of Nepal. Iconography helps us a little here for the more complex esoteric forms of Mahāyāna Buddhism were apparently transmitted to Nepal and Tibet from Bengal. The subject matter of the ivory then would be especially appropriate for this latter region.

Certain hints can be gleaned from stylictic details. The elephants below, while appearing frontally with trunks lowered as at Ellora, are rather typical of Pala art. The curious padmasana posture of the legs, not one above the other, but side by side, can be found in early Pala bronzes. The square thrones are prominent and their borders are simply beaded as in the murals of Ajanta, and the early sculptures of Pāla Bengal rather than elaborately carved with scroll patterns as in later Sena stones. The columns are very slender, again like some of these in the paintings of Ajanta. The general conformation is in harmony with that typical of early Pāla art. The Pāla type in large stones, even at its best, has a rigid effect. The limbs are rounded but the big shapes are not. In contrast the smaller images, especially in metal, continue the ease and grace of Gupta. The gentle poses of the Bodhisattvas in the second zone are directly descended from the classic example at Ajanta in Cave I which is probably seventh century, and at the beginning of the Medieval style. The Nepalese question permits a tentative answer. While Coomaraswamy aptly describes this Northern art as "retardataire", and as embodying the best of Gupta as late as the ninth century, the three Nepalese examples known to this writer are markedly different in iconographic details such as halo and throne shapes from the ivory under discussion. They also seem somewhat less delicate and detailed in treatment. With no history of provenance or excavation to aid us in placing the ivory under consideration, we must therefore assign a probable ninth to tenth century date in Bengal.

Fortunately, we need not vacillate in describing the style of the ivory



ZONE I FOUR DHYANI BUDDHAS

ZONE II FOUR DHYANI BODHISATTVAS ZONE III LOKAPALA, ANIMALS HEAVEN BETWEEN HEAVEN AND EARTH EARTH

as early Medieval at its best and of an aesthetic quality as remarkably high as the object itself is rare. Indeed this ivory mandala is one of those unique objects which convey a compact and precious essence of a creative culture.

- 1. Hackin, J., Recherches Archeologiques a Begram, 2 Vol., Paris, 1939, Pl. 28 ff.
- A. Maiuri, "Statuetta eburnea di arte indiana a Pompeii", Le Arti, I, 1938-39, pp. 111-115; M. L. D'ancona, "An Indian Statuette from Pompeii". Artibus Asiae, Vol. XIII, No. 3, pp. 166-180.
- 3. See A Ghose, "Some Old Indian Ivories", in Rupam, No. 32, Oct. 1927, pp. 123-5. Nepalese ivories of medieval date are in the Victoria and Albert Museum, London, the National Collection of Fine Arts, Washington, D. C. (No. 288 Gellatly Coll.), and the Guarino Collection, Ascona, Switzerland. For the latter, see Salmony, A., Artibus Asiae, V.
- 4. Height: 4½ inches. Width: North to South, 4 inches. East to West, 4 inches. Weight; 38 oz. Eugene Fuller Memorial Collection, Seattle Art Museum, Seattle, Washington, U.S.A.
- 5. Getty, A., The Gods of Northern Buddhism, New York, 1928. Gordon, A., Iconograhy of Tibetan Lamaism, New York, 1939.
- See for example the bronze volive stupa, Plate VIII in A. Ghosh, A Guide to Nalanda, Delhi, 1946.
- Rowlands, B., "Barabudur", in Art in America, Vol. 29, pp. 114-127, Jl '41.
- Coomaraswamy, A., History of Indian and Indonesian Art. New York, 1927, p. 145.

ILLUSTRATIONS

- PL. I-II. Ivory stūpa, Bengal, ninth or tenth century A.D. Eugene Fuller Memorial Coll., Seattle Art Museum. Views of three of its sides.
- Pr.. III. Schematic diagram of the figures represented in the ivory. Insert below. Jambhala, brone, in Seattle Art Museum, Seattle, Washington.





THE JAIN TEMPLE ROOM IN THE METROPOLITAN MUSEUM OF ART

by W. NORMAN BROWN

History

In the years 1594-96, according to a preserved inscription, a certain Ratnakumyarajī, of the wealthy and well-known Jain clan named Osvāl, with, probably, his sister and daughter as collaborators, financed in Pāṭan,¹ ancient capital of Gujarat, the construction of a temple dedicated to Pārśva, twenty-third of the twenty-four Saviours (Tīrthaṅkaras) recognized by his faith. This he did under the advice of a Śvetāmbara pontiff, Jinacandrasūri VI of the Kharatara gaccha, on whom, says the inscription, the Mughal Emperor Akbar bestowed the title of "the most virtuous, glorious pontiff of the age" (sattamaśrīyugapradhāna).² This building came to be known as the Vāḍīpura—or Vāḍī-Pārśvanātha temple.

Either as part of the original structure or as a latter accretion, there was erected a small, elaborately carved wooden domed room, being the kind of architectural unit known as mandapa ("porch, hall"), and this, which is now installed in the Metropolitan Museum of Art, New York (Pls. IV-VI), is the subject of this paper. The incentive to build the temple was, of course, piety. A renewed urge of the same sort, over three hundred years later, led other Jains to dismantle the original relatively unpretentious temple complex and replace it with a more expensive edifice, made of stone and finished inside with marble, producing, we may hope, a notable entry of merit on its patrons' account in the great cosmic ledger and so leading to happy rewards in future existences.

The older room was the more interesting and more beautiful of the two, and by a bit of good fortune, possibly due to virtuous acts in some previous life, two Americans, Mr. Robert W. de Forest and Mr. Lockwood de Forest,

¹ Otherwise known as Anahilavāda-Pattana.

² See description of this temple in James Burgess and Henry Cousens, The Architectural Antiquities of Northern Gujarat (Archaeological Survey of Western India, Volume IX), 1903. pp. 49-51, Plates IV, XX, XXI.

some time after the dismantling, in 1916 acquired the room just mentioned, and then laid up, or presumably laid up, further rewards in some future rebirth by giving it to the Metropolitan Museum. It was installed and opened to the public in 1919, and has now the double distinction of being, first, one of the two Indian temple rooms on exhibition in the United States—the other is a pillared stone hall from Madura in the Philadelphia Museum of Art³—and, second, perhaps the finest ensemble of Indian wood-carving outside its native land.

There must, however, have been a flaw in the de Forests' merit, because they never saw the temple while standing at its original site and so did not get certain basic information which would have been useful for the museum installation. But luckily two members of the Archaeological Survey of India did, Dr. James Burgess in 1869 and Mr. Henry Cousens in 1886-87. They published a photograph, two drawings, and a brief description of the room.4 But unfortunately, again, somewhere along the line, merit was imperfect, for the account which they published was both brief and at certain vital points insufficient. They did not describe the temple complex as a whole, nor did they indicate the relative position of this room or explain its function. Most of their report concerns the inscription mentioned above, which, they say, was preserved on a slab "built into the wall of the principal mandapa" of the temple. This allusion, whose brevity must have seemed to them unimportant, is to us tantalizing. Was the room or porch now in the Metropolitan Museum the "principal mandapa" or not? If not, what was it and what was its purpose? And was it built at the time mentioned in the inscription? For lack of a sentence or two we are left to conjecture about the full significance of the inscription. But the architectural data which the two authors explicitly left us are of great value, and I shall refer to it frequently in the rest of this paper.

Wood-carving in Gujarat

Wood-carving, as so skillfully illustrated in this room, is widespread in Gujarat and nearby, and may be an art of long standing there. It is often found on doorways of private houses, mouldings, cornices, balconies, façades. It appears frequently inside small temples, where it is fully

³ Published by W. Norman Brown, A Pillared Hall from a Temple at Madura, India, in the Philadelphia Museum of Art, Philadelphia, 1940.

⁴ See footnote No. 2.

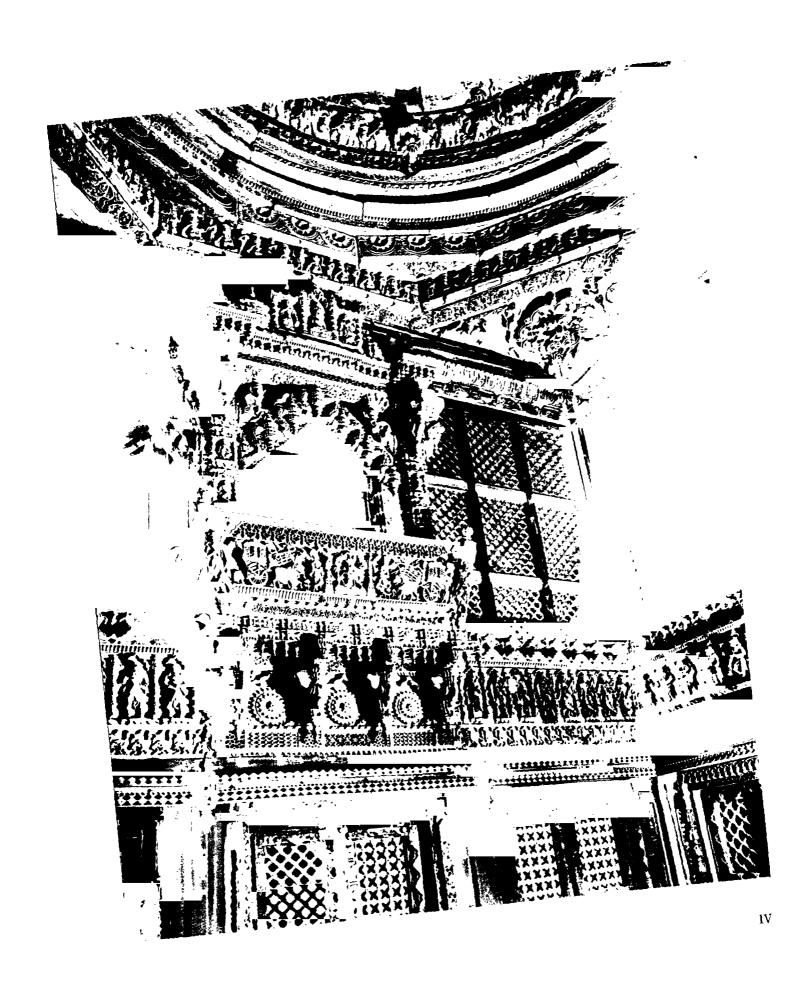
painted; a few traces of paint are visible on the Metropolitan's room. The intricate wood-carving of the region seems to be imitated in the interior marble decorations of such temples as those at Mount Abu, where the stone is as delicately and minutely worked as the wood in our mandapa.

But though wood is abundantly used in Gujarat and many examples of fine wood-carving exist, few whole wooden temples or even temple rooms are now known. One which is similar to this but less satisfactory to study was acquired by the Baroda Museum in 1947, and as now installed is described by Dr. H. Goetz and Mr. U. P. Shah in the "Bulletin of the Baroda Museum and Picture Gallery", vol. VI, pts. 1-2, 1948-49, pp. 1-30, with 60 figures on XXIV plates. The latter room has a central portion, about the size of the Metropolitan's mandapa, and two wings. It has a complex history, being composed of pieces of varying date and diverse provenience. finally assembled by someone, probably a wealthy Jain layman, who used it in his house. The Metropolitan's room, being a whole but for some figures removed after the dismantling, and having all been executed in a single period, is a rarity even in India, and the excellence of the carving makes it a most valued possession. Only as recently as 1939 the then Director of Archaeology for the Baroda State, in which lies the city of Patan where the Metropolitan's room was constructed, printed in his annual report a lament that this had been exported from India.' The carving of the room is deep and crisp; the figures full of action and life; the composition careful though traditional. All is filled with joyous devotion; it is a fitting memorial of the Jain religion.

Construction

The original structural features of the room are clear from the archaeological officers' report and the elements of the room as they can be seen in the Metropolitan Museum. It was built on a very simple skeleton, consisting of four corner posts a little more than five feet high and set a little more than eleven feet apart, over whose tops extended beams or lintels. The corner posts rose from the level of the ground outside, but the level of their base was not the level of the inside floor. This was, instead, a little less than two feet lower. Inside the posts was a ledge or walkway about fifteen

⁵ Annual Report of the Archaeological Department. Baroda State for the year ending 31st July, 1938 (Baroda State Press, 1939), p. 15 and plate XII. The Director, Dr. Hirananda Sastri, thought only one balcony was involved, not a whole room. For some other examples of wood carving from Northern Gujarat, see Burgess and Cousens, op. cit., plates XXXVI and XLVI.



or sixteen inches wide, which ran around all four sides of the room, and at the inside edge of this was a straight drop of about twenty or twenty-one inches to the floor, which was, therefore, sunk that distance below the outside ground level. Mr. Cousens' drawing shows this feature plainly.

The straight perpendicular sides of the room were about five and a quarter feet high, and were originally open to the air all the way around. There was no doorway. The way to enter the room was to step on the walkway inside the corner posts, and then step down to the floor. To do so one had to bend a little on coming to the walkway and then lift one's feet carefully over the low railing on the inside of it as one stepped down to the floor level. The awkwardness of this procedure led to confusion when the room was installed in the Metropolitan.

In the center of each side of the room was a balcony (Pl. IV) projecting inwards, and the rear posts of the balcony served with the corner posts to support the superstructure. The pediments of the balconies were upheld by front posts and struts, and the balconies were supported from below by brackets. These elements and beams were all richly carved in higher relief (Pl. VI). The drop from the walkway to the floor was faced with a dado, which was also elaborately decorated.

The dome construction began above the lintels connecting the corner posts. First, an octagonal course was imposed upon the basic square, cutting off the corners and leaving squinches, which were then embellished with carving. Above the octagonal course was then laid a sixteen-sided course, which cut off the angles of the octagon. Rings were then raised on this latter course, diminishing in diameter and corbelling inwards. A center element with a large pendant bound the parts of the dome together (Pl. V). Externally also the room was finished as a dome. The whole is similar to parts of many stone temples of Gujarat and lower Rajputana, notably those of the Jains at Girnar, Satruñjaya, Mount Abu.

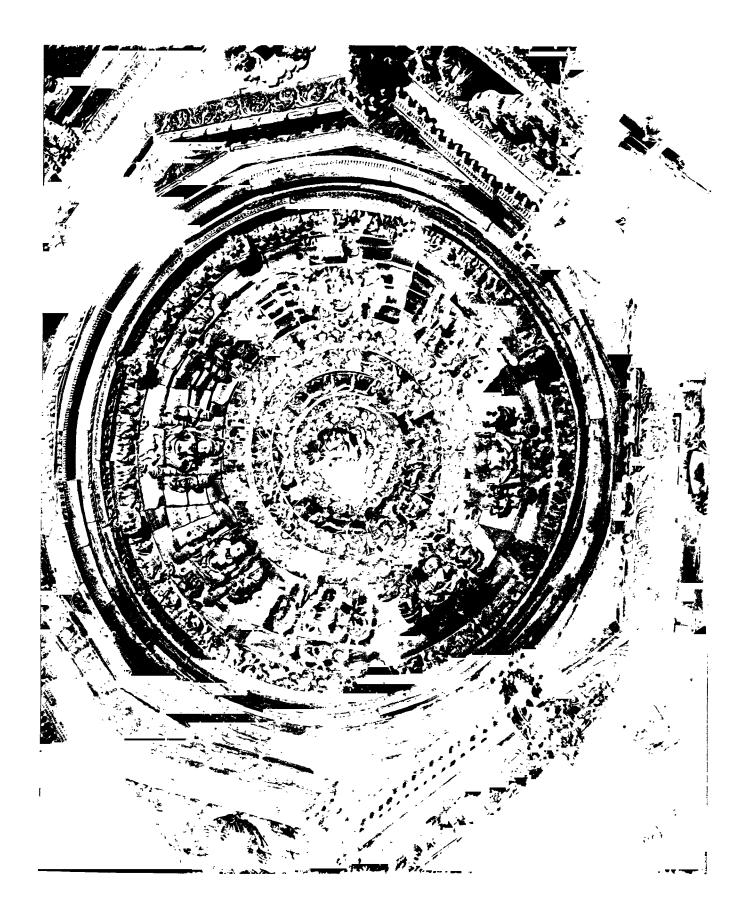
When the room was constructed, the sides were left open, as is the case with similar elements in stone temples, but at some later time an iron grating with a mesh of about an inch and a quarter was introduced in the sides to keep out bats, swallows, and pigeons, which are a common nuisance in Indian temples. The published photograph shows a balcony (now installed in the Metropolitan at the east), and the drawings exhibit the cross-section and the ceiling.

When installing the room the Museum staff was baffled. It could see no obvious logic in a room which was so inconvenient to enter and to use. The Museum, therefore, rationalized the structure by giving it a lower part, which in effect amounted to another story, making the room high and narrow and rendering it practically impossible for any ordinary human neck to bend far enough backward to let one see the ceiling. The addition, like the room, was composed of carved wooden elements from Gujarat and Jain in their subject matter, but the wood was of a different kind, the carving was of a different style, and the two major parts of the reconstruction had never been together until they reached New York.

The Museum was quite frank in stating what it had done and why. When it opened the room to the public, it published in its "Bulletin" (January, 1919) a note signed "J.B." (Joseph Breck), telling something of the room's history; referring to the publication by Burgess and Cousens, and also remarking, "Unfortunately, neither the drawings nor the photograph [that published by Burgess and Cousens] show the structure below the frieze [meaning the dado] nor give the ground plan of the temple; but presumably the structure was borne upon columns, thus permitting access to the Shrine and other halls,"

The presumption, however, was incorrect, and the reconstruction is unjustified. First, the addition of a lower section destroys the proportions of the original. These domed rooms from temples in Gujarat—and a number have been published —are regularly constructed on the basis of a cube with the upper corners rounded off. This room was originally about eleven and a half feet in each dimension, and the length and breadth are that now. But the height of the reconstruction is about eighteen feet, or half as much again as it should be. Secondly, the drawing shows clearly that the room was built at ground level. Thirdly, the photograph, when carefully examined, shows beyond the grille, at the left of the balcony, faintly yet unmistakably discernible, a man standing on the outside ground or pavement, peering curiously within, looking very much like somebody's chaprassi. His feet are at about the level of the ledge or walkway which runs around the inside of the room. The photograph also shows, just inside the dado, a few inches of the original floor. There can be no doubt that the

⁶ See Burgess and Cousens, op. cit., plates XLVIII, XLIX, L for an especially elaborate example at Modrera.



room was complete without a sub-structure, that it was erected at ground level and had sunken floor, and that it was not meant for passage but had to be passed around.

In the reconstruction there is a wooden grille in place of the adscititious iron grille mentioned above, which kept out bats, swallows, and pigeons. The present grille is evidently otiose, since the Metropolitan Museum does not appear to be bothered by such pests.

Original position and function

Though Burgess and Cousens fail to state explicity the position of this room in the total temple ensemble and its function, we may make deductions on these points with a fair degree of confidence. We may start by referring to the main features of temples in Gujarat. There, as is general in India, the essential part is the cell or shrine called garbha ("womb interio") or garbhagrha ("womb-house"), which houses the image of the deity or, with the Jains, the Tirthankara who is being honored. This usually has only one opening, the door. Above the cell is a ceiling or false roof, over which in temples of any pretensions rises a spire (sikhara). All this is called the vimāna ("celestial car", "palace") of the god, and it may in itself constitute the entire temple. Usually, however, there are additional elements. Before the vimāna may be a maṇḍapa ("porch, hall"), which may be either open on the sides or enclosed by walls. In a temple of any size at all this has columns. When the porch has enclosed sides it is called antarāla ("passage way") or gudhamandapa ("enclosed porch"). In front of this frequently appears, especially in large temples, another mandapa serving for groups of people to use in various connections indicated by the names applied to it, which are sabhāmandapa ("assembly hall"), rangamandapa ("theatrical hall"), nrtyaśālā ("dance hall"). This may be attached to the temple structurally or may stand independently of it in front. When it is without walls it may be known as an ākāśamandapa ("open-air hall"). In a sabhāmandapa the ceiling is frequently a heavily carved dome, as in the example in the Vimalasahi temple on Mount Abu, which has as its chief theme the sixteen Jain Vidyādevīs, or in the detailed example at Kanodā or that at

⁷ For the Indian temple in general see Stella Kramrisch, The Hindu Temple, 2 vols., Calcutta, 1946. For temples in Gujarat, see Burgess and Cousens. op cit., pp. 21-32, from which the material following in this paper is drawn.

⁸ See Kramrisch, op. cit., I, pp. 21-7, 257.

⁹ See Muni Vidvāvijava, Abū, Sirohi, 1933, p. 64.

Modherā.¹⁰ There are many modifications of temple plans, with variation in the relative size, shape, and situation of elements, and with the addition in some large temples of still other accessory units.¹¹

To identify the purpose of the Metropolitan's mandapa, we may note three points. First, Cousens' drawing clearly indicates that it was free-standing. Second, Burgess and Cousens in referring to the long inscription say that it was "built into the wall of the principal mandapa of this temple". Since the only part of the temple which they describe is the porch (mandapa) which we are discussing, it seems clear that if the inscription had been on it, they would have said so explicitly. In referring to the principal porch, they must have been referring to another than this; that would have been the mandapa just before the vimāna, which in any case would have been the natural place to set an inscription. Third, the Metropolitan's being awkward to pass through, would not have been meant to give access to the shrine. It was to be passed around except when being put to its own special use. We may conclude, I think with assurance, that the room was constructed as a sabhāmandapa ("assembly hall") open to the air.

Our mandapa may have been erected at the same time as the main shrine or at a later time, and either by the same patrons or by some other. There is no way to determine this point with complete certainty. It could have been a separate expression of religious feeling by some sincere soul who set it up, a small jewel of a building, edifying to enter and behold, commemorating some specific occasion for gratitude to the superhuman powers or celebrating some pious purpose happily achieved. In it the patron and his family or some other small group might on occasion have entertained a distinguished monk to have the blessing of listening to his discourse or have had the Scripture recited at a festival season or have viewed a dance in honor of some exalted figure or have engaged in some other profitable exercise. It scarcely seems likely to have had frequent and regular use.

In view of the remarks made just above it is evident that there is no positive and unequivocal evidence about the date of the mandapa. Burgess

¹⁰ See Burgess and Cousens, op. cit., pp. 71 ff., 110 f., plates VII, XLVII. XLVIII, XII; cf. also p. 108, plates LXXXII, LXXXIV, LXXXVI.

¹¹ See Burgess and Cousens, Passim.

and Cousens in discussing the mandapa refer to the inscription and imply that they consider the dates which it gives as applying to the whole temple including this part of it. The inscription says that the construction was begun "in the reign of the Pādishāh, the illustrious Akabbara, in the year 1651 after the era of the illustrious king Vikrama, on the 9th of the bright half of Mārgaśīrsa, on the civil day Monday, under the lunar asterism Pūrvabhadrā, in a propitious hour." This is equivalent to November 11, 1594.12 The image was consecrated on May 13, 1596. But, as is intimated above, the mandapa may have been built later than the vimana and its porch. To answer the problem of the date, therefore, we must seek other criteria than the inscription. There are a few which may be used. One is the headdress worn by Tirthankaras. This is either a triple-tiered parasol or crown, such as appears in illustrated Jain manuscripts of the 16th century,13 or a crown with points of varied length or a parasol, such as appear in manuscripts of the 17th and 18th centuries but cannot be absolutely denied for the late 16th century. Further, the goddess Laksmi and her attendants, who are shown on the parapets of the balconies, wear crowns with flaring points, such as are assigned by Goetz and Shah to the 16th and 17th centuries.¹⁴ Again, the bullock carts on the parapets compare with one shown by Goetz and Shah, though it is more elaborate and has four wheels, and assigned by those authors to the late 16th century.15

If the mandapa was carved later than the dates in the inscription, the time seems unlikely to have been much later. It seems that we should take it to be of about the beginning of the 17th century. Iconography

When the room was constructed, it is likely that the architect and his patrons, or patron, had some overall unifying principle in the iconography. This we may try to deduce.

The temple of which it was a part commemorated Pārśva, the twenty-third of the twenty-four Tīrthankaras, but as a maṇḍapa it did not house an image, and the theme of the carvings is not Pārśva or any series of circumstances relating to him, nor is it concerned with the Tīrthankaras as

¹² Burgess and Cousens, op. cit., pp. 49 f.

¹³ Cf. W. Norman Brown, Miniature Paitings of the Jaina Kalpasūtra, Washington. 1964, fig. 101.

¹⁴ Goetz and Shah, op. cit., figs. 24, 27, 28, 30, 59.

¹⁵ Goetz and Shah, op. cit., fig. 13.

a whole. Those representations of Tirthankaras which occur in the room are in a secondary position. They are four, appearing in the pediments of the balconies, and are not easy to identify, since the characteristic marks (lānchana) which differentiate Tirthankaras are here damaged. They seem to be as follows: in the eastern balcony (as now installed) Rsabha, with his bull; in the southern, Rsabha, with bull; in the western, Rsabha, with bull; in the northern, Santi with deer. All four are shown as perfected souls (siddha) in Isatprāgbhāra at the top of the universe. There they exist as pure and incorporeal soul, and hence have no resemblance to anything material, whether animate or inanimate. But to symbolize them, and only for the purpose of symbolism, they are shown through the medium of the human body. The human body does not depict them; it only suggests them. When the Svetāmbaras so symbolize their Saviours, they show them arrayed, ornamented, and crowned as kings, with royal parasols overhead, and flanked by attendants bearing fly-whisks and waterpots. A temporal world-conqueror would be similarly presented, and we may recall that according to Jain mythology each of the twenty-four Saviours could have had such a worldly career if he had not elected instead to follow the religious life and become a Jina ("Conqueror") in the spiritual struggle. In this room the Jinas appear to be incidental to the main iconographic themes.

The main themes deal with lower goals than the difficult spiritual victory achieved by the Perfected Beings. They are, instead, the aims of creatures reconciled to remaining for an indefinite period in the transient phenomenal universe, where they are bound by the action of the senses and destined, therefore, to experience innumerable rebirths in the revolving samsāra ("round of existence"). Such beings are satisfied with the temporary goals of prosperity, joy, and protection from evil, and these are the themes of the carving in the mandapa. They are illustrated in a heavenly environment, and in an earthly. The creatures seeking and enjoying them or aiding mortals to enjoy them or to commemorate them are divinities and their attendants, human beings, and possibly some subterranean entities.

Protection from evil is the chief motif of the dome. Its hemisphere represents the vault of heaven, which meets the square earth at its circum-

¹⁶ Cf. Brown, op. cit., figs. 81, 100. 114. 128.

ference," reaches to some great height at the zenith above us, and encompasses the activities of men and gods. It features carvings of the eight deities whose function it is to guard the universe at the cardinal and intermediate directions so that it may be free of molestation from any evil forces. The idea is a common one to all Indian faiths. It stems from the old notion of the Rg Veda that the universe operates, or should operate, in conformity with a body of cosmic law called the rta, which when fully observed insures its equilibrium or harmony. Unfortunately, there exist forces contrary to the rta, characterized as anrta, which are constantly endeavouring to enter the universe of gods and men and disrupt its orderly cycle. These are demons (yaksas) and beings whom they induce to do their will. The gods are continually engaged in repelling these evil forces, and men have the duty of assisting the gods, chiefly through due celebration of the sacrifice. In post-Vedic India the need for protection is formally recognized by designating certain gods, most of whom already appear in the Veda, as world protectors (lokapāla, dikpāla, vāstudevatā). They defend against evil intruding from the horizontal directions, either at the four cardinal points of the compass or at eight. They need not watch the nadir which is protected by the Earth goddess (prthivi, bhūmi, bhū), nor the zenith, which appears to need no protection, since the only opening in it, in Vedic mythology, appears to be that "straight path" (sādhu pathi; cf. RV 10.14.10) that leads to the realm of the gods and the blessed dead, where no evil is ever found. Protection by the Direction Guardians is invoked in India in many circumstances. At the dedication of a building in Gujarat, for example, as one of the final ceremonies, the master craftsman with attendants and a priest or two mounts a platform raised on a high scaffolding and calls to the regents of the eight airts. In Jain temples these same figures often appear on the domed ceiling of a mandapa. This is the case with the Metropolitan's carved room. To start at the east, which is the normal point of departure in India, and box the eight points of the compass, the deities with their vehicles (vāhanas) in the original construction were:"

East: Indra and elephant

Southeast: Agni and ram (looking, however, more like a goat or deer)
South: Yama with buffalo (from some views looking like a horse)

¹⁷ Cf. Kramrisch, op. cit., I, p. 29.

¹⁸ In the Metropolitan's installation these have been moved backward two places.

Southwest: Nirrti with dog West: Varuna with boar

Northwest: Vāyu or Marut with gazelle

North: Kubera with elephant Northeast: Išāna with bull

Each deity is set in an architectural niche and is flanked by two attendants. In many cases distinguishing attributes have been broken off. Between these eight gods originally stood eight female figures, but these were already disposed of before the room was acquired for the Museum, and the pieces of wood on which they were carved have now been replaced by blank substitutes. We can get a rough idea of them from Cousens' drawings of the dome. They may have been meant for heavenly women (apsaras or surasundarī) or more probably the Direction Maidens (dikkumārī), who are fifty-six in number and assist at various important functions, such as the heavenly bathing of the future Tīrthankara when born on earth for his last existence." They stood on lotuses, which are still preserved, and play musical instruments (lute, both single-bowled and double-bowled, flute, drum, cymbals, flute), and danced.

Ancillary to the main figures in the dome and their attendants were other figures, human, animal, and hybrid in form, and a profusion of auspicious vegetation designs.

The most conspicuous position occupied by any of these was on the pendant, which was decorated with eight figures of female musicians and dancers, again likely to be either apsarases or dikkumārīs.

Next to the pendant is a ring of conventionalized flowers, then a ring of animals—lion, tiger, elephant, cow, camel, horse, buffalo, deer, bird, snake, mongoose, śarabha (lion's body with elephant's trunk), another hybrid consisting of quadruped's body with a bird's head. Some are suckling young; others may be engaged in fight—śarabha with lion, lion with elephant, snake with mongoose. These various creatures perhaps represent the animal world as it is considered to exist in the heavens.

The next ring consists of musicians whose instruments are drums, lutes $(v\bar{i}n\bar{a})$, trumpets, flutes, cymbals. One has a horn with a bend like a saxophone. Many of the musicians have bird's legs and tail on a human

¹⁹ Cf. Brown, op. cit., pp. 30 f. These female figures hardly seem likely to represent the Vidyā devis, which are shown in other sabhāmaṇḍapas (cf. footnote 9 above).

torso, or a bull's head or monkey's head and tail on a human torso, and are, therefore, kimnaras ("what sort of man", "near-man").

Outside this ring is a ring of conventionalized flowers. Then come the main figures, already mentioned, and below them is a ring of elephants in procession. Under these are suspended the eight conventionalized lotuses on which originally stood the eight female figures now missing, which may be meant to represent the Direction Maidens. On a level with these flowers is another ring of musicians, playing a variety of instruments, and singers. Beneath this are the other ring-courses of the dome, showing conventionalized vegetation decoration. Next, below the lowest ring is a sixteensided course carved with three half-lotuses to a side. Then appears an eight-sided course in two registers, of which the upper contains sixty-four male figures seated, each holding a jar or a rosary. Though these have only two hands each, it is possible that they represent the sixty-four Indras. In each side with its eight male figures are nine attendant fly-whisk bearers. many of whom are in dance poses. The lower register has an elaborate foliage design. In each of the squinches under the cross pieces at the room's four corners was an elaborate floral design ending in the corner in a kirtimukha ("glory face"). These are now all badly damaged, but one has two kimnaras playing flutes and two makaras (sea monster) standing upright on their curled tails, with bodies twisted as in the dance. The decoration of the squinches seems to end the representation of heavenly regions. All there has been joyousness rendered secure by the protection of the Direction Guardians with probably the accompanying Direction Maidens.

Below the squinches we come to a representation of the four-square earth, and there the significant subject matter is treated in the carvings of the balconies. Each of these is an elaborate architectural unit surmounted by a pediment in which is seated a Tīrthaṅkara as a perfected being, flanked by attendants. The structural elements are heavily decorated with jars and other lucky symbols. But the most important feature of each is the parapet which has as its theme adoration of the goddess Lakṣmī. She is the dispenser of prosperity, especially worshipped by merchants, and therefore supremely favored by the Jain community. Her annual festival in the autumn, when shopkeepers close their accounts, people pay their debts, and the prudent worship the rupee, bears the name of Dīvālī (Skt. dīpāvalī "row of lights"), and with Jains it not only honors the goddess but also

marks the entry into complete nirvāṇa of Mahāvīra, the last of their twenty-four Tīrthaṅkaras, (Saviours), which they say occurred on this day.²⁰

The central figure in each balcony carving is clearly this goddess Lakṣmī, because the four hands hold her regular attributes. In the upper ones are lotuses; in the lower are a rosary and a small jar. Still more, two elephants stand beside and above her, sprinkling her with water from their trunks. Her seat is regularly a lotus, not shown here as a seat, but appearing triply in the dado, below, and she symbolizes the productive earth resting upon the cosmic waters, while the clouds, represented by the two elephants, send down the fructifying rain.

In the different balconies, the figures which accompany the goddess vary. In that now at the north they are female musicians and dancers, crowned as she is, some of them playing the $v\bar{i}n\bar{a}$, the Indian lute. At each end is a lay figure holding a rosary and leaning upon a long bamboo staff, which in India is still a common weapon. He is perhaps a pious warder.

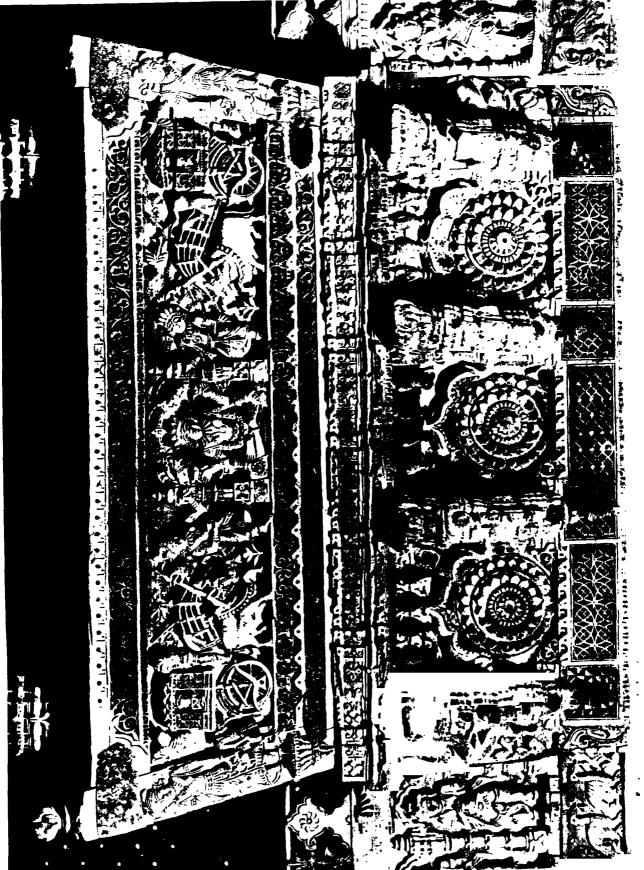
In the present eastern balcony fly-whisk bearers attend the goddess, while musicians blow trumpets, and girls with joined hands dance around a tree, probably meant for the *tulasī*, or basil, which is sacred to Lakṣmī.²¹ Here seems to be a reference to one of Lakṣmī's autumn harvest festivals, when there is feasting, and young girls dressed in white sing and dance.

In each of the other balconies the accompanying carving is of two oxcarts (over one is a bird) and their drivers with small figures seated in their passenger's compartments dressed as monks preaching, but surely not really monks, since the latter are fobidden to travel on land in vehicles. These scenes suggest a custom of wealthy pious Jains to go on pilgrimages and to finance large parties of accompanying pilgrims.²² Such a layman usually takes a monk's vows temporarily, travels on foot, and goes to Mount Satruñjaya in Kathiawar, about 150 miles from Pāṭan, where our maṇḍapa was constructed. Satruñjaya is sacred to Rṣabha, first of the Tīrthaṅkaras in the present world-cycle, who died there. It is he who seems to be represented in the pediments of those balconies whose parapets show the carts. At the top of Mount Satruñjaya is a fortress filled with temples, of

²⁰ Cf. W. Norman Brown, op. cit., p. 40.

²¹ Cf. Goetz and Shah, op. cit., fig. 27.

²² For a painted cloth depicting such pilgrimages, now owned by the Brooklyn Museum of Art. see an article by W. Norman Brown in Art and Thought (Studies in Honour of A. K. Coomaraswamy), pp. 68-72.



which the chief is dedicated to Rṣabha. Pilgrims who can afford the price may ride around this shrine in a silver cart, thus putting a perfect finish on the sanctified journey.

In the two balcony scenes showing carts the attendants standing at the ends hold fly-whisk and water jar, as did the attendants flanking the Saviours in the pediments. The pillars beside the goddess Lakṣmī appropriately enough terminate with the vessel of plenty.

The floor of the balconies is at the same level as the walkway around the interior of the room and was originally, as has been indicated, at the level of the ground outside. Between the walkway and the sunken floor is the dado. The drop to a level below the surface of the ground may signify that this, the lowest part of the structure, represents that part of the subterranean world which is just below the earth's surface and above the hells. Here dwell the eight classes of kindly creatures known as the *Vyantara* gods, who are custodians of the treasure within the earth and are known sometimes in Jain texts as sajjana, literally "good folk". In a well-ruled city filled with righteous people they spread their treasures abundantly. As appearing in our carving they are male and female; some carry jars, presumably full of riches; some have weapons, swords and battle axes; some are attendants bearing fly-whisks; some beat drums; some dance.

On the same level with these figures are lotuses shown in three medallions below each balcony, possibly to represent the earth as Lakṣmī's seat, resting upon the cosmic waters.

Underneath the row of figures is a procession of hamsas, each carrying a spray of leaves or a flower bud in its beak. Below the lotuses and in the same register with the hamsas are panels of $j\bar{a}l\bar{\imath}$ ("network"), wood pierced in delicate geometric designs.²³ Underneath this register were originally further carved wooden courses, a few inches in height, which can be seen in the Archaeological Survey's photograph but are missing from the Museum installation.

The dado is surmounted by a low railing which broders the walkway. It consists of a repeated motif common as an ornament on Jain buildings,

²³ Comparison of the installation of the balconies in the Museum with the photograph of a balcony when in situ published by Burgess and Cousens shows that the pierced wooden panels belonging originally to it are now under another balcony. The pieces of the dado originally on the two sides of the balcony have also been placed elsewhere; so, too, the beam of the octagon originally above the balcony has been moved to some other place.

which is highly conventionalized but may perhaps have one of two origins. It may be a geometric or even foliage motif from Islamic art, since many such items appear in Western India after the Muslims established themselves there. The other possibility is that it derives from the vase of plenty which is well known in Jain symbolism. In late times this is shown in a kind of cusped niche which frames it.²⁴ Between the separate examples of this motif are shown pots with sprigs of some plant whose leaves grow in threes.²⁵ The significance of the motif seems in any case to be good fortune.

Interpretation

What now is the general content of the carving which decorates the Taking together the ideas illustrated in the dome, on the balconies, and on the dado, we may find in this room, I think, an epitome of practical Jainism for a well-to-do pious layman. He knows and lauds the great goal of salvation which those mighty Victors, the twenty-four Jinas, have won, and the others of the Perfected Beings. He recognizes the importance of the shrine at the rear of the temple which honors one of them, the Tirthankara Pārśva. But few indeed are those who have ever attained such success. He knows that he could not become one of them. He is more modest in his pretensions and aspirations; he must be content with something less lofty. less abstract, less difficult. And so he does not frequent that cell which points to salvation in the non-phenomenal world. Rather, he stops in the phenomenal universe to make the most of it, and in it he takes his seat under the well-guarded vault of heaven. No harm will come to him, thanks to the vigilance of the Direction Guardians. He may even hope, by virtuous living, appropriate alms-giving, reverence to the holy ones, abstinence from killing and other vices, and the practise of not too severe austerities, to check the worst effects of karma and cultivate good ones, and some day himself win to a celestial abode where he will hear the divine music and enjoy the divine pleasure. That is his highest expectation. Meanwhile, whatever may be his lot in the unpredictable future, he can count with some more assured hope upon the best that life can give in the here and now. Laksmī has favoured him with the wealth to achieve expensive pilgrimages, erect costly

²⁴ Cf. Brown, op. cit., figs. 4, 28, 152. For a late example see Helen Johnson, Trişaşţiśalākā-puruṣacaritra, Vol. I, Ādīśvaracaritra (Baroda, Gaekwad's Oriental Series, Vol. II, 1931); plate IV.
²⁵ Cf. Goetz and Shah, plate I, fig. 1; plate VI. fig. 19; the lintel in the former figure, showing this motif, appears to be upside down.

temples, practise lavish philanthropies. It is only fitting that he should honor her—honor her, and thank her too. And thank her not only for favours already granted, but also, with a bow to her proverbially fickle nature, thank her for favours still to be received. With her have co-operated the yakṣas and other subterranean beings who guard the treasures beneath the earth's surface. Them, too, he honors that they may prolong their generosity. In this way he will continue to enjoy the comfort and plenty brought to him, one of the deserving rich, by the united action of heaven, earth, and the underworld. His are the solid blessings of the successful business man.

CONCEPT OF DEVA IN HINDU THOUGHT

by BETTY HEIMANN

IT IS A GENERAL HUMAN POSTULATE TO VISUALIZE BEINGS MORE PERFECT AND LESS HAMPERED BY DEFICIENCIES THAN MANKIND

The main deficiency of Man deplored by himself since olden times is the fact that he is limited in the range of his bodily functions and intellectual capacities. His limitation is felt with regard to Time in so far that he is bound to the law of temporary fatigue, gradual bodily decay and final death. The gods as Man's ideal counterpart are thus postulated to be free from these human shortcomings. Accordingly, they are assumed to be endowed with the predicates (as postulates) of being not subdued by human fatigue. They are visualized as a-svapna or a-nimiṣa, not needing sleep, nor wanting ever to close their eyes. Nor are they bound to illness and decay, for they are nir-jara, and finally they have not to undergo the hard-ship of dying—they are amaras, immortal.

It is not an ideal state either that Man's natural functions are limited in Space. Thus his gods are considered to be vivasvat, all-pervading, or $vibh\bar{u}$, being present wherever their wants or desires urge them to function.

As to his intellectual qualities, too, Man is not satisfied with his restricted reach. The gods must be vibudha, endowed with all-pervading (vi) enlightenment and knowledge. Where human intellect has to stop, debarred from entering into the secrets of Nature and of highest knowledge, the divine mind can still penetrate. There are secrets which are only known to the gods while being beyond the ken of Man. Thus the deva-guhyas are recognized as lying outside the range of Man's feeble divinating powers, but attainable for super-human divination.

Another postulate originates from the psychological sphere. Superhuman happiness and even mindedness are wanted. The gods therefore can be continuously $suman\bar{a}s$, happily well-balanced. This indicates a divine disposition.

However, Man is not only concerned with concepts of gods representing an ideal attainment for its own ends. Practical and, in a way, egoistic

human considerations also play their parts in the assumption of gods. The gods are postulated as *sumanās* not only for their own divine sake, but Man expects for himself a beneficial result from this divine disposition. The gods will thus be more inclined to distribute favours unto Man who is dependent on them. The postulate of *sumanās* has also a subjective, not only an objective aspect. The favourable disposition of the Gods will bear its fruit also for human welfare.

Gods and ethics

The gods are in all respects the ideal Man. This finds its reflection also in the ethical sphere. Man's general tendency towards the good, creates gods as the personification of virtue and moral excellence. The gods are mostly $punya-\hat{si}la$, having the character of rightful action; they are $dharma-\bar{a}tman$, striving towards law and order. However, there is an innate tendency in Man also towards the powers of evil. The $a-dh\bar{a}rmika$ man is the counterpart of the $dharma-\bar{a}tman$ and the $dur-\bar{a}c\bar{a}ra$ is opposed to the $punya-\hat{si}la$. Good and evil, both attract Man and it lies in his own power of free will or rather in his innate tendency to follow the one or the other. Thus he accepts good and evil gods.

Good and evil gods

The term deva implies in itself a double aspect. Super-human force may be benificent or obnoxious. God and demon is essentially the same. Accordingly, the Jains classify denizens of Heaven and Hell both as beings of essentially the same super-human qualities. Sometimes, however, the Indian religions introduce a kind of gradation in rank between them. Though both belong to the same super-human family, the demons are somehow fallen from their original divine rank, or at any rate, of divine perfection, and assume the position of yet deteriorated divine beings—fallen angels, as it were. Otherwise the Demons are lowered in position as but offsprings of the gods thus slightly inferior to their seniors, the gods themselves. Māra, the devil, is accordingly called deva-putra, son of the gods. Gods and demons are then allocated to different localities; the gods having as their deva-bhāga, the northern sphere of heaven, while their opponents are assigned to the southern part.

However, in olden times the position between gods and demons was in reverse order. The asuras, the demons, were the older and the more

powerful brothers of the gods. Brāhmaṇas and ancient Upaniṣads tell again and again that the asuras are if not the more beneficient, the more efficient, forces. Fear of god, instead of love of god, prevails.

It may be however that some historical accidental facts have contributed to these psychological considerations. A certain group of the inhabitants of Iran (hence the name 'Iranians' or 'Aryans') branched off from their Persian brothers and descended southwards into India bringing with them former common Iranian concepts retained or transformed. In Avesta, the asuras (or ahuras) are the main gods of beneficient powers while the divs (devas) represent the evil forces. The Aryan-Indians of Rgvedic times changed in opposition to their former brothers the meaning of asura and deva into their respective contraries; the asuras now are accepted as the evil, while the devas become the good gods. However, there lingers in the minds of the Indians through the centuries the acknowledgment of the asuras' uncontrollable powers. The devas are but the younger brothers who have had to fight for their supremacy. There is even a linguistic indication that 'asura' was the original and prevailing concept. A synonym for 'deva' is 'sura' which in itself cannot be easily explained. It seems that a later artificial etymology derived it from the original term 'a-sura' in splitting off the first vowel of the term in question in the sense of a negation. However this problem of etymology may be, the devas are considered as the natural opponents (ari) of the asuras or danavas.

Gods as human postulates

Man can never transgress, even in his concepts of super-human beings, his own limits of categories. Tensions and counter-tensions only in a higher degree than in his own human sphere are assumed to exist also in the world of demons and gods. The devas, too, have their enemies and as such their fear. Gods, too, have their struggles for recognition and superiority. The demons are at least their equals in power and might.

Also other indications of human weakness are retained in the concepts of gods. The Hindu cosmogonies give strange accounts of how the world came into existence. They teach that the world is the outcome of a self-dismemberment of a primary cosmic being or a sacrifice performed on this primary being by the gods. The world is never a creation out of nihil; primary Matter existed before it side by side with the gods themselves. The gods may decide only on the form or shape which the world shall take.

Or else, the world is a kind of biological emanation, an outflow from the divine body itself brought about with or without intention by tapas, effort and exertion. But even this restricted act of world-formation seems to transgress the gods' normal powers. They are exhausted after this operation, very much like a human being who has over-taxed his natural capacities.

Structure of the divine society

The gods are the more perfect, or more vital, counterparts of Man. Though being on a higher level than ordinary Man, the gods are bound to a structure which still lies within the framework of human vision. As a counterpart to human society a somehow similar divine society is assumed. The gods, too, must have a kind of gradation in their community. There are main gods and also there are lower kinds of gods, devakas, deva-gandharvas, deva-bandhus, devikas and deva-yānas (serving gods). are even among the main gods a temporary, or constant, gradation. One of them is the ati- or adhi- va or the deva-vati or deva-simha (God Siva). or adhi-deva, the recognized leader. All the main gods get in turn these honorary titles. First, most probably, Indra, the god of vigour and highest virility, was considered the supreme. Besides, he is truly called the god of fertility because it is he who is also concerned with cosmic fertility. It is he who with his earthly-heavenly weapon, the club, bursts open the Vrtra the firm enclosure, of the heavy rain-clouds so that the water necessary for all production can freely flow. Similarly the winds, the Maruts or Vāyus can assume the highest rank by virtue of their special divine function of all-pervading presence and vigorous movement in penetrating the universe with their forceful and purifying motion. Rudra, the howler, the roaring temepst, manifests divine strength, though in a terrifying aspect. Under his euphemistic name of Siva, the beneficent one, he assumes later the all-embracing functions of generating and destroying simultaneously or successively. His third and highest aspect is that of the indifferent agent of these interrelated acts of productive and destructive powers; he is thus the master-uogin. Or in the more intellectual sects of later Hinduism God Visnu is elevated from his low rank of a local sun-deity with restricted functions (his three strides) to the position of the universal productive power which manifests itself again and again for the benefit of earthly beings. Occasionally also god Brahmā, the pale reflection of the all-embracing impersonal Brahman, may be regarded as the highest deity. But the special function assigned to him, that of being merely the world's creator, never gained a predominant significance in the Hindu mind. As stated above, the natural concept for the Hindu is to assume that the process of world-formation is a quasi-mechanical outflow of a primary productive chaotic substance. Besides, the one-sided function of creation alone without its natural counterpart of interrelated destruction or re-absorption is too unnaturally limited for the Hindu mind. This explains the fact—most puzzling for the Western observer—that just Brahmā, the creator-god, owns an amazingly low number of temples, quite out of proportion to those dedicated either to Viṣṇu or Siva.

There is a gradation in the divine society just as in the human community—only with one difference: major, or even supreme, divine beings may successively become minor gods (e.g. Varuṇa) or minor gods are later raised to the highest rank (e.g. Viṣṇu and Rudra-Siva); there is no fixed caste-system or hierarchy among the gods.

There is yet another aspect of this gradation of gods which is puzzling for the historian of comparative religions, but which is very much in accordance with India's Nature-bound religious feeling. The gods are the representatives of one or more natural functions. Even if the one or the other god is momentarily accepted as the supreme, he is never acknowledged as the unique. He is at the highest assumed as the iṣṭa-devatā, the chosen or favourite deity. But choice presupposes the existence of others besides the one specially selected. From Rgvedic times through the ages not Monotheism, but—as Max Muller happily termed it—Heno-theism, is taught. The one or the other god may be temporarily the leader, the primus inter pares.

Male and female gods

Other aspects of human society, too, are transferred from the earthly to the heavenly spheres. The Divine does not find only male, but also female, representatives. This is a general postulate of all religions, but once more developed in India in a characteristic way.

The finds of the earliest civilizations in the Indus valley, in Mesopotamia, in Egypt and other parts of the Near East, all reveal traces of the cult of Mother-goddesses. There are the figurines of exuberant feminine

deities in Mohenjo-Daro and in the most recent excavations in Mesopotamia. There is the cult of Mother Isis in Egypt and of the so-called 'Magna Mater' which spreads from Asia Minor via Greece to the Roman world of religion. It is true, however, that in early Rgveda, Brāhmanas and Upanisads the female aspect of the Divine was pushed to the background by the predominantly masculine orientation of Brahmanic tradition. Later Hinduism, however, brought the mother-goddesses once more to the fore. Nature, the universal Mother, is personified in all her generating and destructive powers. God Siva cannot be visualized without his Sakti, his feminine aspect of Nature's productivity. As such he is shown together with his consort Durga or Kali (representing divine dark and destructive power) or with Pārvatī, his generating force. The devī par excellence is Durgã. The dark emotional uncontrollable power of Nature finds its more appropriate expression in a feminine deity. The emotional texts of the Tantra-sects are preferably dedicated to the devi, not to the deva (e.g. the Devi-tantra.) In the narrations of the Puranas, on the other hand, the masculine god is predominant; note the titles: Visnu-Purāna, Bhāgayata-Purāna, Kūrma-Purāna, etc.

Here the Devi-purana ranks only as an upa-purana, a secondary text.

God as human beings

The gods, though elevated in rank, are nevertheless bound also to some laws which govern human life. Gods also need food, an abode, a play-ground, bath, scent, flowers, ornaments and even physicians. They have been born at a certain time and as such have, though an increased, only a limited, span of life. In a way, they also have to submit to the law of rebirth. For all these various human aspects we find analogous predicates attributed to the gods. Gods also need food, vīti, anna, āhāra, andhas; they want baths snāna, scents kusuma, play-grounds (udyānas and a Kudas). They require physicians (though partaking of the food of immortality: amṛta!) Gods have cikitsakau, who have to put right occasional disturbances of their health. Besides, they are also in need of a spiritual teacher, of a devā-guru. Certainly, all their needs are of a subtler and more elaborate kind than that of their human brothers, but, in a way, human they are.

Furthermore, not all their needs are satisfied within their own divine society. They also need the assistance of Man himself. They are

also desirous of the food which Man can provide. The sacrifice is devajagdham, eaten by the gods. Gods are strengthened by human sacrifice (the significant term frequenetly used in Rgvedic hymns is that the oblations of gross or subtle matter strengthen, vardhayante, the gods). Gross matter like offerings of cattle, honey or the intoxicating drink Soma helps the gods to fulfil their wanted actions. Besides, they enjoy, or even need, the gifts of more subtle substance like concentrated thought (dhī) or hymns of praise. Significantly the most effective ones among these hymns are called the Brahmans, i.e. those which cause the gods to grow (caus. of bṛh). Because of its universally effective power it is just this Brahman (later used in singular neuter as a cosmic principle) which supersedes the gods; it is in itself sufficient to achieve whatever is needed.

Like human beings the gods also want a place of residence, they need their deva-āgāras,-bhāvanas,-āvāsas,-āyatanas,-ālayas,-okas, etc. But Man assigns to his gods more elevated places of residence. Either they reside in the select regions of Heaven or they take their abode in specially chosen places on earth. They are invited by incantations to inhabit as their homes temples specially erected for them. Their images in the temples are considered not only symbols of divine functions, but actual manifestations of the gods concerned. The deva-pratimā or deva-pratikrti is believed to be imbued with the divine power itself. At certain festivals the images are driven about in their temple-cars, on outing, as it were, for the gods themselves, though having the additional purpose to give the divine blessing to as many human beings as possible. As all great masters on earth, the gods in the temples have their special devoted servants, the deva-sevakas, who attend to all their needs. A slightly different aspect has the cult of the gods provided by the deva-dāsīs, the female temple-dancers, who please the gods by their devotional performance. They may transfer their service instead to the gods on earth, the priests. Here is an idea not dissimilar to the strange marriage-custom of niyoga-vivāha, introduced into the service of gods. The favour which the woman grants to other beings is assumed to be done for the sake of her divine master and thus gets the higher meaning of a religious ceremony.

However, the presence of the god or of his image alone does not suffice to make the temple a real abode of the Divine. The temple needs the additional *charisma* of divine Nature itself. It is no accident that

amidst the elaborate carvings of the temple-walls nearly everywhere one wall is left untouched by human hands. This cannot be interpreted as a merely historical accident that for one reason or other the temple-builder was obliged to give up his work—the frequency of this occurrence rules out this explanation. It seems that intentionally the human work remained unfinished in order not to cut off the more divine forces of Nature. The same idea seems to underly the construction of *Gopuras*, open door-gates as they are, which lead to the wider natural surroundings. Human artefacts, even when consecrated by the supposed presence of the gods, need the further sanctification by Nature herself.

Gods as other beings have their yoni, place of origin. They are born from the womb of the deva-ātmā, Aditi, their divine mother of boundless generating power (a-diti). Gods have also their offsprings, sons and daughters. These younger gods may not have the full venerable rank of the gods themselves. The deva-kanyās or deva-anganā may only attain semi-divine dignity, e.g. the Apsaras.

Whatever has come once into existence, is bound to have also once an end. Thus though the life-span of a god is longer than that of an ordinary man, nevertheless the *deva-āyus*, too, is limited. According to the lower or higher rank of the gods concerned, a lower or a higher number of years, is assigned to them. Only Brahman, the neutral principle, transcends a definite span of life

We may combine the concept of a limited deva-āyus with the dogma of divine avatāras, divine descents. The gods are bound to re-appear, though not in so regular periods, as Man.

There is a certain rṣi-hotra considered as a partial reincarnation of god Viṣṇu. There is also the teaching of the Bhagavadgītā that Viṣṇu-kṛṣṇa re-appears only when his purifying power is needed on earth. Thus his re-appearance may be likened to the apparition of a Messiah. However, the god is bound to re-appear either in human or animal form—think of the ten Viṣṇu-avatāras and the less fixed avatāras of God Siva. Besides, there is another difference between human and divine re-embodiment. Only a part of the divine being, only an amśa, is re-incorporated while his main part (usually counted as three quarters of the divine body) does not enter the inferior womb.

Man's relation to devas and their relation to man

Though the gods are taken as a separate category distinct from Man both these classes are sometimes combined in a collective Dvandva-compound: devamanusyam, god and man. And actually there is a continuous interrelation between them both mainly established by the sacrifice. Agni, though a god in himself, is the mediator between god and man, because the sacrificial fire lit on earth rises in its flames to the upper regions. Agni, the fire, is the divine messenger, the deva- $d\bar{u}ta$. His intermediary functions are indicated in his appellations as the vit-pati, the Lord of the house (on earth) and as deva-vaktr, the speaker to the gods, who transmits the human wishes. Another messenger who also as such combines human-divine qualities is the breath, the medium for the songs of praise. Prana (or Vāyu) is the singer for the gods, he is the deva-girvāna or deva-gāyamāna. Concrete or less concrete oblations offered in the fire of the altar (vedi) or in the breath of the chant are the deva-vatas desired by the gods. The sacrifice and chant establish contact between Man below and the gods above. They are deva-yānas, ways paved by Man leading upwards. On this path constructed by Man the gods are induced to descend in response to the call. They are magically attracted by the upwards trail of flame and breath.

But also on their own accord the gods contact Man. They choose for their abode certain distinguished parts of the human body. Their light enlightens the human being. The eye, the main human sense-organ of perception, is significantly called the deva-dīpa, the lamp of (or from) the gods. The puruṣa in the eye is frequently mentioned, e.g. in the Upaniṣads, as part of the divine cosmic puruṣa. Just as the eye, the ear is a focus of perception; the ear in its turn is the receptacle of sound and speech and provides another selected place of divine entrance into the human sphere. The ear, especially the left one, is thus called the deva-hū, the one which receives the call of the gods.

Another place of concentrated power within the human body is the pericardium, the cavity of the heart. This centre of human life-force, of intellect and emotion—according to Hindu conceptions—is an appropriate seat of highest human, and thus divine, force. It is considered the devaśuṣṇi, the cavity in which the gods reside.

The finger-tips, then, the concentrated nerve-centres of the body,

too, are because of their super-sensitivity connected with the Divine; they are the deva-tīrthas, the crossing points through which gods (and demons) can approach the human being.

From all these indications we may gather why the centres of human perception are sometimes simply called devas or devatās. They symbolize concentrated capacity of perception. The gods represent human faculty in its highest degree.

There is a continuous influx and relationship possible between Man and his gods. Extra-ordinary faculties in Man are in themselves divine. Certain rsis of outstanding attainment are as such intermediary beings between Man and the gods. They are deva-rsis like Atri, Kaśyapa, Bhṛgu, Pulastya, Nārada and the Angiras. They are all called deva-bhūtas or deva-bhūyas, they are raised to the rank of gods or are worthy to attain this position by virtue of their ascending tendencies. In this light we have to value compounds like deva-guru or deva-putra, honorary titles granted for instance to Kaśyapa. The ambiguity of Sanskrit compound-terms provides an alternative of interpretation. Either deva-guru may be explained as a guru like a deva or even as the guru for the devas. Similarly deva-putra may mean: a son of the gods or even having devas as sons. Both alternatives are a possibility for the highest rsis; they are the bridge between ordinary men and their ideal counterparts, the gods. Rsis belong to both spheres, to the heavenly and the earthly one.

Just as the rsis are beings of super-human power, so are the Brāhmaṇas, those who are endowed with the all-powerful power of Brahman; they are called the devas on earth. Ever since this title has been conferred to them in Brāhmaṇa rituals this claim is retained by the privileged Brāhmaṇa caste. Their social predominance is based on their magico-religious endowment with Brahman-force which in Brāhmaṇa times replaced former Rgvedic gods and which the personal gods of later Hinduism can at their best only equal.

Other outstanding human persons, too, though with less religious rights, can claim for themselves, or are attributed with, the title 'deva, resp. $dev\tilde{\imath}$. The king and his consort are to be considered by ordinary man as beings of a higher species. They are addressed as deva or $dev\tilde{\imath}$.

A more limited sphere of divine rank is assigned in the family circle to the husband and master of the wife. She has to venerate and to serve

him as her private god, as her own deva. Accordingly his nearest relatives, his brothers, assume the rank of devaras.

Heaven and earth are inseparably interconnected. $Dy\bar{a}v\bar{a}$ - $prthiv\bar{i}$ is a dual compound; both together are the parents of all men and gods. The earth, too, is a $dev\bar{i}$, the divine consort of Heaven. Her offspring, too, have the divine spark.

Not only men, but also other beings on earth belong to the divine family. Deva-jana is the class-name of snakes. They have also a special claim to the title of relatives of gods. They represent dangerous powers. Besides, they are connected with the fertility-cult, most probably because of their connection with water. It may be that this relation between water and snake is established on grounds of external similarity in appearance. The winding snake is like the winding river. Rivers are depicted in Hindu art in the shape of a snake.

Rivers themselves are clearly connected with the Divine. The holy Gangā is the deva-nadī or deva-kulyā, the divine river. This sacred stream on earth is visualized as originating in the pure waters of heaven. Before descending to earth she rests for a while on the holy forehead of god Siva. Purity and purifying power as well as fertility are the divine attributes assigned to rivers. The descent of the Gangā from heaven to earth establishes yet another bridge between the two spheres, another deva-yāna. Just as the sacrifice ascends to the upper regions, so the divine fertility, be it rain or the holy Gangā, descends from above to the earth.

Gods and bhakti

The idea of interrelation between heaven and earth is retained from early Rgvedic cosmology through the dogmas of identification of microand macro-cosmic objects in Brāhmaṇa—and Upaniṣadic times. A new offshoot of this basic idea is apparent in the later theistic Upaniṣads and in the Bhagavadgītā. In full strength it is to be seen in medieval India, shortly before, and after, Hindu and Moslem ideas amalgamated. I think of the concept of Bhakti. Bhakti, a term derived from the root bhaj, to share or to participate, establishes a way of communication and contact between god and Man. The human worshipper approaches through his active faith and devotion his iṣṭa-devatā, his favourite deity. Just as the sacrificer of early days he is sure of the success of his action. Re-action will invariably

follow. Man is the prior agent in this process of mutual contact between God and Man. Instead of concrete oblation now only the subtle substance of concentrated thought and devotional emotion is offered. Bhakti is a spiritual sacrifice. Bhakti-mārga is a new form of ancient karma-mārga. But there is one significant difference. Not only the initiated Brahmana priest, but everybody who is capable of strong feelings—whatever may be his caste or training—is now able directly to contact the Divine. Having the right bhakti, he is bhakti-mat, godly. Very often this act of wooing the gods by means of bhakti is seen under the simile of a human, though elevated, love-affair. The aim is participation with the God, a union, if not an identification, with Him. Just as the old Upanisads (e.g. Brhadāraņyaka) visualize the non-duality between Ātman and Brahman under the simile of the love-union between husband and wife, just so, only in more detailed descriptions, does the bhakti-mat expresses his want for uniting with the Divine. The more active partner in the desire for union is, according to Hindu ideas, the woman. Note the teachings of the Sāmkhya system how Prakrti, the female principle, tries to attract through her emotions Purusa, the less willing male. Accordingly, the human bhakta, the lover, depicts himself as the woman tending towards his god, the man. Not only the bhakti-poetesses like the Princess Lalla, but also Caṇḍīdasa or Kabir, the men, describe themselves as the passionate women-lovers, who are ready to sacrifice honour and all their being to their divine partner, the God.

Gods as the higher powers

After the devas in the course of Upanisadic thinking had established themselves as the superior powers over the older and formerly stronger asuras, derivations from the word 'deva' are used to indicate divine dignity and goodness, i.e. godliness. Here are some examples: deva-ātman, devya, devatā, all these terms are applied in the sense of māhātmya, the good authority, the predominant dignity.

Gods as the representatives of the beyond

Accordingly, all knowledge surpassing human capacities is assigned to the gods. Etymology, for instance, whose intricate connections are not easily grasped by man, is raised to the status of a divine privilege. It is called the $deva-vidy\bar{a}$.

There is a significant difference between the Indian and the Western modes of thought implied in their different valuation of the word 'the other'. The Sanskrit term 'para' and its Greek equivalent 'heteros' tend towards positive or negative appreciation respectively. The Greeks, always striving after established order, certain measure, clear definition, and distinction, were inclined to see in everything which is otherwise from that which is already fixed a kind of disturbance. Everything which is not foreseen, is uncanny and gains a negative sense. The Greeks bound themselves firmly to this world of ours, ever reluctant to transgress its well-defined The Indians, on the other hand, early conceived the transitory nature of all worldly phenomena and conditions. Taking the world in general also only as a kind of individual, the world as a whole, too becomes for them but a fleeting phenomenon. They have the immanent urge of transgressing the limits, the fixations and definitions. They see the world in a dynamic function of continuous change and development. (Bhūman). Every happening has only a momentary transitory value (see in the Buddhist dogma of the ksana-vāda, of the but momentary existence of everything, the last consequence of this Indian idea). Whatever lies before our eyes in a visible tangible shape undergoes change, is liable to growth and decay and can never be of lasting and final value. Thus the para, the other, which is not fixed to one form only and contains thus more than one potentiality of possible form, gains for the Indian the value of the higher, the beyond. Only the materialists who rank the lowest among the Hindu systems of thought, cling to the moment and the accidental visible form in hand. Their slogan is: na para, nothing beyond the momentarily given. Only the sense-perception and enjoyment of the moment is true and They are the na-astikas, the non-believer in permanent transexistent. cendental Being. As such they are the atheists or deva-piyus, the decrier of gods. All the other Hindu systems, even the so-called 'realistic' systems of Nyāya, and Vaiśeṣika, do not feel satisfied with presently given facts only. The Nyāya, though being mostly concerned with the practical means of leading a logical discussion, include in their categories of prameyas, objects of knowledge, the investigation of the Atman, the connection between Man and other or higher powers. Furthermore, they tend through all their logical operations to come to the real tattva-jñāna, attainment of general truth, and finally to the nihśreyasa, to a stage of liberation beyond which nothing lies any higher. The Nyāya includes in its range of investigation also speculations on personal gods and impersonal Divine.

Also the second so-called 'realistic' system, the Vaiśeṣika, though, as its very name indicates, mainly occupied with the research of the viśeṣas, the actually given differences in this world of phenomena, nevertheless postulates something beyond visible perception. In the physical world they are seeking for the adrṣṭa, the invisible, but yet existent, entity. They call it the minute subtle atom, the anu, or the all-embracing ether, the $\bar{a}k\bar{a}\acute{s}a$ —both equally beyond the range of human perception. It is no accident that these Indian physicists use the same terms and concepts (anu or animan and $\bar{a}k\bar{a}\acute{s}a$) which the ancient Upaniṣads (e.g. the Chāndogya) employ as symbols and visualisations of the Divine. The concept of the Beyond is engrained in the Indian mind, it may take the form of personal gods or of the super-personal Brahman or of physical postulates of the immense which lies outside the sphere of measurable things.

Gods and nature

In ancient Regredic times the gods were representatives of either single natural phenomena or of combined natural functions or—as in the case of 'Henotheism'—the whole bundle of divine attributes of Nature is transferred successively from one to the other main gods. Indra, the warrior on earth and the warrior in heaven, was connected with Nature's phenomenon of the thunderstorm. He sets free the heavenly waters of fertile rain. The mighty roar of the thunder is in later Hinduism the commanding voice of gods in general. It is called deva-śabda or deva-garjana. It is likened to the deep spontaneous sound of Man's yawning which is accordingly called deva-datta, produced, or given, by the gods. The thunder, its heavenly counterpart, is a more tumultuous noise; it is the deva-tumula.

In connection with the concept of divine thunder stands the devamīḍha, rain as the divine outflow pouring down unto the earth. Rain is the deva-mātṛka, having its origin from the Gods.

But also the fertility water on earth, springs and rivers, are connected with gods and are specially appropriate places for meditation and worship. Deva-tīrthas or deva-prayāgas are the narrow valleys out of which the pure springs come forth; lonely mountain-rocks and crevices,

dark mysterious caves and hollows, all these are places on earth where the nearness of the Superhuman is felt. Fear of hidden powers arouse feelings of helplessness and need for guidance. As such they are called deva-bilas, deva-kundas, deva-khātas and deva-guhus. Outstanding lonely heights deva-kūtas, and their geological opposites, unfathomable depths, are uncanny, and as such, mysterious places. Here Man feels awe before the Unknown. Nature's setting alone is sufficient as a place for worship with. or without, an image of a god. Nature itself provides sacred surroundings. Thus caves or grottoes or steep rock-walls are favourably used for carvings of divine personalities—note the rockfigures of the Jain Tirthankaras in Gwalior or the Buddha-figures carved on the rocks of Ceylon or the Hindu images in the caves of Elephanta. Beneficient natural powers of undying fertility and vitality are incorporated, as it were, in tropical vegetation. As such plants and trees and shrubs are easily connected with the Divine. There are various trees which are called deva-vrksas or devakāsthas, for instance the Indian fig-tree because of its exuberant intertwined outgrowth, or the pine tree, or the hibiscus plant. Also all m-dicinal plants used for the restoration of human vitality are assumed to be imbued with extra-ordinary powers.

Animals, too, because of their impressive vitality and fertility or because of their dangerous strength are representatives of the Divine on earth. The bull, the cow, the elephant, the monkey or the snake are themselves holy beings or are connected with the cults of certain gods.

Gods are symbols of Nature's powers. As such they can counter-act human expectation and reasoning. The simpleton who acts and re-acts naturally, though may not reasonably, is the deva-priya, the favourite of the gods. The deva-grahin, the man who is seized by the gods, is in an ecstatic state which leads beyond the normal human reasonable action. He is like the Greek entheos (lit. the man in which the gods reside) exalted, i.e. no more bound to the limited capacity of Man.

Gods are super-human

Man has to follow the higher powers voluntarily or against his will. The divine prescriptions, the *deva-hitis* or *-hitas* are inviolable. The *daivam*, the impersonal Divine, is his Fate.

Gods and magic

Gods and demons, surpass Man because they are endowed with superrational, incalculable powers. The $deva-h\bar{u}ti$, the call from the gods, gains thus in the Purāṇas the meaning of a magical spell to which Man has to succumb.

A reflection of the magical powers of the gods may be seen in Hindu legal proceedings. The gods are invited to be the undeceivable and infallible witnesses. The deva-sāksya establishes unerring truth of crime or innocence against which no appeal is of avail. The deva-enasā is a curse or condemnation which cannot be counter-acted. The enas, the guilt stated by the gods, inevitably comes to its due fruit, retribution.

The gods are imbued with super-human magical power. The devacakra, a circle made by the gods, cannot be transgressed and is a binding spell.

Accordingly, also human instruments of dangerous efficacy and might are simply called *devas*, for instance, the sword.

There is yet another function of generally asumed magical quality attributed to the gods. I think of the deva-māyā which gods and demons alike may exercise. Indra (and Varuna) in the Rgveda is called the devamāyin or puru-rūpa, the one who can appear in manifold forms. Krsna in the Bhagavadgītā possesses a similar deva-māyā while reproducing by means of his vi-bhūti all bhūtas in their divergent (vi) shapes at will. Yet this $m\bar{a}y\bar{a}$ is never simply a fraud or illusion or a free creation out of nihil, but only a transformation of formerly existent Matter and a kind of acceleration of its innate quality of change. It is 'creation' in the sense of the Protean power accepted by the ancient Greeks. Even in later Buddhistic and Vedanta teachings $M\bar{a}y\bar{a}$ is not unreality of things, but all empirical objects are viewed as but $M\bar{a}y\bar{a}$, measurable phenomena, (from root $m\bar{a}$ to measure). As such they are limited and transitory. $M\bar{a}y\bar{a}$ has its due empirical reality, but seen sub specie aeternitatis is but an accidental and not ever-lasting formation of Matter. The assumption of divine $M\bar{a}y\bar{a}$ is thus not a purely magical, but an ontological, concept of continuous change in forms of existence. It is the empirical part of primary immeasurable Being. The gods' natural magic is only an exemplification of the scientific law of transformation of Matter.

There are other properties assigned to the gods which tend to the

Unknown. Deva-praśna, the question which no average man, but the gods can answer, is the enquiry into the not-yet-manifest future; deva-praśna is fortune-telling, or the revelation of Man's Fate from the knowledge of Man's interrelation with cosmic powers, stars, etc.

Not uniqueness is for the Indian a postulate of the divine form, but the capacity of assuming innumerable shapes representing innumerable natural qualities. In this context we may view the connection of the Hindu gods with the concepts of number. The god is not unique, but he may be connected with the number one, the unit and matrix of all numbers or with various combinations of the number three which symbolizes the perfect balance of extremes. As such the Upaniṣads enumerate as the numbers of the gods one or three halves or thirteen or thirty-three or three thousand three hundred and thirty-nine, etc.

Gods and fate

Man is responsible for his own actions and their due consequences (karma). However, his life-span is restricted and he is not able to survey himself the full results which become manifest only in the series of his reincarnations. Only the perfect yogin has this extra-ordinary gift.

A longer āyus, span of life, is however assigned to all the gods. Thus they can overlook in a wider view Man's course of development in his sequence of embodiments. Thus the gods know what is no more, or not yet, visible for Man's restricted outlook. Though they may not predetermine the events, they are aware of the inevitable laws which govern the happenings. As such devatā, daiva or daivata may assume the meaning of Fate.

Gods and gambling, luck and chance

Gambling, at any rate in an honest play, gives result beyond human control and calculation. Unforseen gifts are bestowed on the winner. A friendly power seems to favour the lucky one. Gods have their hands in it. Thus the gambling-house is called deva-sabhā or dyu-sabhā. Devin or devitar is the name for the gambler who puts his trust in the Unforeseen. Devanas are the dice and, on the other hand, the service to the gods. A more doubtful, implication of the divine gambling may be found in Bhagavadgītā X 36 where god Kṛṣṇa claims to be the dyūtaur, the gamble, for the chalayatam, the cheating gamblers.

Philosophical concepts of the gods and the divine

The essential life-force in Man is super-individual. It is part and manifestation of a divine power: deva-ātma-śakti. The Ātman resides in the body or in a series of bodies as the inner ruler, the antar-yāmin. He is not limited in Time nor in Space. He manifests himself in other coexistent beings on earth or in other spheres simultaneously or in continuous succession. All individual beings or souls are but emanations or manifestations of the all-embracing, ever-productive principle of Brahman, the superpersonal Neuter. Gods, Men, animals or plants are thus interconnected as parts of the whole. The fact of their interconnection with regard to their equal or graded value is the main problem of the Vedanta philosophy. Sankara, the Advaitin, the believer in non-duality or identification of all beings with the highest Brahman, views sub specie aeternitatis all beings, be it gods, men, animals and plants, as essentially of the same value. From the transcendental point of view the small differences in value and capacity do not matter much. His main concern is to establish the dependency of all of them on Brahman, the root-principle which is immanent, and yet beyond, all of them. All of them are but secondary and transitory evolutions from Brahman. They are among themselves, and with regard to the highest principle, sa-ātmaka, identical.

Rāmānuja, then, though still maintaining that Brahman as principle lies beyond the range of all personal manifestations, emphasizes that the Gods are of a higher, i.e. less restricted, capacity than Man, let alone all other earthly beings.

Rāmānuja is less a transcendental thinker than a psychological philosopher. His epithet is significantly the yoga-indra or yati-indra, the master of psychological Yoga. He speculates on the differences between Man and his higher counterpart, the god. His dogma is that of sa-yujyatā, connection, but not union, between the Divine, the gods, and men.

Finally, Madhva, the Theist, leaving aside the concept of the relationship between the Brahman-principle and all its personal manifestations, asserts that the gods themselves are the highest goal Man can strive to attain in liberation, a goal however, which Man can never entirely reach. Not complete identification, nor essential similarity, but at the highest sa-lokatā, nearness in space in a kind of heavenly abode Man can hope for. The gods are the masters and Man their devoted and humble servant.

After all what we have seen in our preceding interpretations either views near to Sankara or Rāmānuja or Madhva are mirrored in the Hindu's various postulates of gods.

Linguistic explanations of the term 'deva'

On the basis of our previous findings we may now venture to approach the problem as to which verbal root or roots or nouns we have to assign the term 'deva'. Does it belong to a root div, to shine, and has this root any connection with div, to gamble, or even with yet another root dev, to lament and implore? Grassmann in his Dictionary of the Rgveda attempts to establish a connection between div, to shine, and div, to gamble. He assumes for both of them a common root with a primary meaning of: to throw or shoot forth. Then 'to gamble' would indicate the throwing of dice and 'to shine' the shooting forth of rays of light. After all what we pointed out, however, 'to shine' itself seems to be the original quality of gods, think, for instance of the mother of all Adityas, of Aditi, the Boundless Light. Gods are praised in the Rgveda by means of rk (from root rc of which arka the ray of light is yet another derivation), in order to make them more and more shining and outstanding, i.e. to make them more divine. If this interpretation holds good, then $d\bar{\imath}v$, to gamble (originally $d\bar{\imath}\bar{u}$), would not be primarily connected with root div, to shine (originally diu), but only secondarily it can be combined with some further postulates of the term deva itself. Gambling, as explained above, is a game of uncontrollable luck and chance. It may well be associated with the gods as they, too, represent powers beyond human control. The third root, then, dev or div, to lament or rather to implore stands in the same relation to deva as div, to gamble. The gods after being recognized as the higher and outstanding forces have to be implored in order that Man can obtain from them the desired results.

As to the other alternative at which we hinted above we have to consider whether the word for 'god' is not directly derived from any root, but is a secondary formation from a noun diva or divit, or dyaus, Heaven. If it be so, then, too, the primary concept of deva would be 'light'. Heaven is the counterpart to darkness, either represented by earth or by night $(dy\bar{a}v\bar{a}-prthiv\bar{\iota})$ or dyu-naktam. The appropriate abode for the devas is thus svar-ga, heaven, or literally the sphere of the light-waves.

One objection, however, could be made against these explanations of the devas as the shining powers of light. In Avesta, the sister-religion of the Rgveda, the devas or divs are the dark powers of evil. Accordingly, the 'devil' is the supreme spirit of evil. But is not just Lucifer, the carrier of light, an epithet of Satan, the devil? He is the condemned, or fallen, former inhabitant of the sphere of light, Heaven. He, too, once belonged to the divine range. Demons and gods, both are essentially the same. Only our subjective attitude towards them extols the one to the highest heaven and lowers the other to the deepest darkness of hell. Man is the inferior, or less potent, counterpart to both of them.

THE SYMBOLIC ASPECT OF FORM

by ALICE BONER

"Symbolism and imagery (pratīka, pratibimba, etc.), the purest form of art, is the proper language of metaphysics." Says A. K. Coomaraswamy in 'A New Approach to the Vedas.' Sacred art of any kind is art attached to and dependent on a metaphysical doctrine, from which it receives not only its subject-matter, but also rules for the composition of images and the treatment of form. Such art does not exist for the sake of its own achievements, but for the sake of realisation of transcendent Truth. It has no other purpose than to be the exponent of a doctrine and a support to religious and spiritual aspiration. It will not therefore deal with the varied aspects of phenomenal life for the sake of their own emotional and pictorial interest, but only in the sense in which they are mirrors of divine Reality. It will not dwell on the transient, accidental, elusive aspect of things, but on their essential being. The material world of forms it will strive to transfigure and to transpose into the world of "Ideas", from which it is derived.

Since sacred art, then, will never attempt to give a sensory illusion of the material texture of this world, it will never use the naturalistic, realistic form-language of profane art. In order to seize upon the spiritual aspect of things it is bound to ignore all that is material, accidental, irrelevant in appearances so as to fall back upon their archetypal configuration. This involves transfiguration of phenomenal entities into essential qualities, in the sense of Platonic "Ideas" or the Tantric "Tattvas". Form thus qualified may retain only an analogical resemblance to factual appearance, but since it is truer metaphysically, it will acquire potential symbol-value.

For the purpose of analysis, Hindu art gives the clearest and most substantial evidence of the working principles of such a symbolic form language. Hindu art has always been governed by transcendental vision and has achieved the rare miracle of integrating all living form into geometrical and architectural patterns, without depriving it of movement, organic vitality and intense expressiveness—rather, on the contrary, enhancing them. The sculptures inside and outside Indian temples are, with all their

plastic exuberance, no mere decorations, but integral structural parts of the architecture. Their meaning as well as their position and form are governed by the same laws that govern the metaphysical plan of the temple.

If the most adequate medium for the transcription of metaphysical conceptions is found in mathematics and geometry, conversely the ultimate archetypes of all living form are found in geometrical figures and bodies, as the final terms to which form can be reduced. Geometry thus provides a plane of refraction, as it were, between the world of essential being and the world of formal manifestation, where each contacts the other as a ray of light touches its reflection on the surface of a sheet of water. It is not surprising, therefore, that geometrical figures play so important a part in every system of sacred symbolism, and that they determine the symbolic character of form as the natural language for sacred imagery.

Geometrical forms are essentially functional—not in a mechanical, material sense, but transcendentally. They are not abstractions, but living images of cosmic forces. They are the graph of definite processes, of laws and energies, that act alike on the sensible and on supersensible levels. Quite apart from mathematical definitions, it is this specific morphology of geometrical figures which is the basis of all symbolic form, whether it be pure, or qualifying and circumscribing natural form.

It may be helpful to make a rough analysis of the essential properties of the fundamental geometrical forms and their basic symbolism in order to show, how in traditional art they take the place of naturalistic form in the figuration of divinity or of any transcendental conception.

The sphere is a body of perfect cohesion, fullness and unity, determined by a centre equidistant from every point of its circumference. Its energy is centripetal when it is indrawn towards the centre, and centrifugal when it expands towards the circumference. In Greek metaphysics the sphere represents universal manifestation, the totality of Existence, emanating from the One, the immanent central Principle and finally reabsorbed into It. It is the form of God: Sphoera cujus centrum omnibus, circumferentia nillibi.

The circle is a line recoiling upon itself and devouring, as it were, its own beginning, eternally revolving around its centre. In Vaiṣṇavism and in Buddhism the circle in the form of a Cakra (wheel) represents the

revolution of the Year, of Time, the cycle of existence, cosmic or human, the Eternal Law, according to which everything proceeds into manifestation and is again withdrawn from it.

The spheroid can be considered as a sphere in the process of pulling itself asunder into two separate units, each with its own centre. It represents disruption of unity, division of wholeness for the sake of multiplicity. Therefore the spheroid stands for the World-egg, the incipient duality of Purusa and Prakṛti which leads to manifestation.

The cube is the only entirely inert form,—without dynamic stress inherently or spatially—firm, rigid and motionless. The cube and the square, its correlate, represent, among the tattvas, Prthvī (Earth), the grossest and densest element, the stable and solid support of all life.

The cylinder, an eminently dynamic form, is a compact sheaf of parallel energies, pushing in both directions along its longitudinal axis into limitless extension. In Buddhism the vertical cylinder, either in the form of the Dharma-stamba, the Pillar of the Law supporting the Wheel of Existence, or as the stem of the Lotus that supports the Buddha in glory, stands for the central axis of the universe. This very conception is expressed in Saivism by the same form, but under a different connotation. Here it is the erect Lingam of unlimited extension which supports the universe. Brahmā as a swan flying up into heaven and Viṣṇu as a boar digging down to the centre of the earth try in vain to find its end. The axis of the universe is also symbolised as the flagstaff before the central shrine of a temple, as the sannyāsī's staff, and in man, the microcosmus, as the spinal column, the Meru-daṇḍa.

The spiral, when it coils inward in narrowing circles suggests a gathering up of forces,—recoil, concentration, involution. When it coils outward in widening circles it suggests procession, expansion, evolution. The spiral in the form of the Sankha (Conch), the Sālagrāma (fossilised shell) and the Seśanāga or Ananta (serpent of eternity) always refers to Viṣṇu-Nārāyāṇa, the all-pervading, creative Principle from which universes are put forth and into which they are re-absorbed.

The triangle, the first of rectilinear figures to define dimension, has also the strongest inner cohesion, for each of its sides is connected with both the others, each is in opposition to and complementary with the others: their balanced tension is one of unassailable unity in plurality. Leaving

aside all the complex and subtle symbolism implied in Trinity, the three in one, we shall only point out its purely plastic symbolism. The equilateral triangle standing on its base, dominated by the vertex represents Puruṣa, the immanent Principle. The triangle standing on its base is also a symbol of Fire (Agni), as an upward tending, involuting force, returning to the Centre. Standing on its apex, with extension dominating it represents Sakti, Māyā, the power of manifestation. Similarly, when the triangle has one of its sides raised into the third dimension and from a plane figure becomes a body, a tetrahedron, it stands for Kriyā Sakti, the power of operative manifestation in space and time.

Not only have geometrical figures and bodies their morphology and meaning, but so have lines. A line is either straight or curved, but when it is curved, it presents an indefinite variety of characteristics.

The straight line, the shortest possible movement from one point to another, is direct, rigid, insensitive, dividing space, but never forming it, itself spaceless and limitless. In Tantric symbolism the straight line represents Jānan-Sakti, direct perception of pure Consciousness (Cit). Jānan-Sakti is also figured in the form of a sword, the sword of pure Knowledge, Discrimination, which cuts across the veil of illusion. To express this conception it is essential that the sword should be straight, not curved. The same symbolism is implied in the spear or lance, the attribute of Kārttikeya, as a combined power of Yoga and Jānan.

The curved line, whatever the degree of its curvature, is always creative, formative, it always delimits or encloses a portion of space and thus originates shape. A curve can be flat or full, relaxed or full of tension. A double curve, bending first in one direction and then in the other, suggests a restless forward drive, progressing by alternation from one opposite to another, like the movement of a snake. In the Tantras the double curve in the form of the ankuśa (elephant-goad) is the symbol of Iccha-Sakti, pregnant with the desire for manifestation—the movement that leads from pure, transcendent being to embodiment in matter.

Surfaces, being only portions of geometrical bodies, have no symbolical meaning in themselves, but they necessarily partake of the character of the body to which they belong. A convex surface, partaking of the nature of a sphere, expresses growth, progression, fullness, expansion, radiation of energy from within. A concave surface, on the contrary

suggests an indrawing of energy, regression, re-absorption and collapse. In a flat surface these tendencies balance each other, so it is neutral like a straight line.

It should not be forgotten, that the directions in space also, have their own symbolical meaning, which greatly qualifies the properties of geometrical form. Verticality makes for dynamism, aspiration, growth and firmness, while horizontality makes for heaviness, quietness and inertness. An upward diagonal slant has sway, action, aggressiveness, while a downward slant suggests fall, defeat, submission, relinquishment. A vertical column is an eminently active form, where as a column lying horizontally looses all stress and becomes inert. A truncated cone standing on its broad end weighs downward and expresses gravitation, stability, earthbound immobility. Standing on its narrow end it becomes light and appears to be soaring upward. All things rooted in the earth, all plants and trees, stand on their broad ends, while creatures that walk about. stand on the narrow end of their legs. Compare the difference in the feeling given by an Egyptian temple, where massive pillars taper from their broad bases to their lotus-capitals and that given by a Gothic cathedral, where the columns expand above into ornamented capitals and the flying arches of the vault.

These examples may make clear what is the nature of the elements that go to the making of sacred imagery. Though in figurative art these fundamental geometrical principles cannot be applied pure, but only in an approximation, still they determine from within the composition and the shape of images. The operation of the artist who works on esoteric lines is never psychological, emotional or anecdotal, but purely formal. He feels form in its purest essence, not for what it represents, but for what it signifies. The intrinsic character of the geometrical pattern imprints its meaning on the sculpture:

Viṣṇu as the supporter of the universe is not represented as an athlete with bulging muscles carrying a heavy globe on his shoulders, but simply in the form of a vertical column, standing rigidly erect, with straightened legs and arms close to the body, holding his four attributes symmetrically on either side and vertically above each other.

Viṣṇu in Yoganidrā, when he is at rest between the withdrawal of one universe and the emanation of the next, is represented lying horizont-

ally on the coils of Sesanāga floating on the Ocean of *Pralaya*. His horizontality is combined with a spiral movement of the Nāga: he is inactive between involution and evolution.

The Buddha after his enlightenment—after he has become one with supreme Truth—is not represented with rapturous expression or gestures, but seated crosslegged in supreme calm, all senses withdrawn, his entire figure inscribed into thee upright triangle, the symbol of $Prak\bar{a}sa$, the Principle of Light. Similarly the victory of the spirit over matter in the Buddha's head is not expressed by any psychological device, but by the predominance of the forehead and by the complete relaxation expressed in the perfect oval of the face.

The principles laid down for the Indian image-maker in his study of anatomy show very clearly how the traditional artist studied form, not in its material likeness, but in its functional expression. Since all objects in this world partake, in their whole frame or in their several parts, in this system of fundamental form, and since the lower living organisms are necessarily nearer to these archetypes, they are considered in their turn as symbols and similes for the more highly organised and complex forms. Their analogies and comparisons give a striking image of the living action of every part of the body: The head is described in the likeness of an egg. with the skull as its broad and the chin as its smaller end, for the egg, like the skull, is a shell containing soft matter of indefinite potentiality. The neck with its circular folds is likened to a conch, not only in its form, but as the seat of the voice. The torso of a man is compared with the head of a cow, the upper part broad and hard, the lower part soft and narrow, with folds above the snout as above the belly. The arms are likened to the trunk of an elephant, because of their downward tapering form, their flexibility and their power of grasping. The legs are compared with the the inverted trunk of the banana tree, with which they share their shape and their supporting power. The eyes are described in various ways according to their cut, their motion and their expression—a safarī fish when they are restless and agile, as a khanjana bird when they are dancing and playful, as a parval when they are drowsy, as a lotus petal when they are half closed in bashfulness. (See A. N. Tagore, Indian Iconography, Modern Review, Vol. XV, No. 3).

And just as anatomy is expressed in simile, Divinity itself is expressed

in an analogy of form, character and movement. Such transfigured form-language cannot be approached either discursively or sentimentally, for it directly touches our inner awareness of cosmic correspondences. Like notes and inetrvals in music, it awakens a response in us from the irrational depths of our being. Like music, it uses form in rhythmic sequences, in a subtle interplay of parallel and opposite movements, resulting in a closely knit harmony, which instead of evolving in time, spreads itself out in space. In these free rhythms is echoed the rhythm of the universe. In "The Transformation of Nature in Art" p. 179 note, A. K. Coomaraswamy says: "In these passages the spiritual significance of rhythm in art is plainly asserted. Conversely they are also of interest in connection with the problem of the origin of art, all rhythm corresponding in the last analysis to cosmic rhythms."

When such inner knowledge of form was still alive, it must have been a language in the truest sense of the word, and understood by all. It was a transcription of the doctrine into visual images, and at the same time a commentary which would in many ways be more clear, direct, and impressive than the written word. The fact that figurative art can show simultaneously elements which in transcendental Reality are co-existent but which words can only explain in a sequence, makes it often more powerful and comprehensive than verbal exposition. On the battlefield of Kurukṣetra, Lord Kṛṣṇa Himself, having failed to move Arjuna to action by His words, resorted to an image in order to convey the fullness of His meaning and showed him His Cosmic Form. In his "Elements of Buddhist Iconography", p. 35, A. K. Coomaraswamy quotes the words of Kobo Daishi: "The Reverend Divine informed me that the secrets of the Shingon sect could not be conveyed without the aid of pictorial representation."

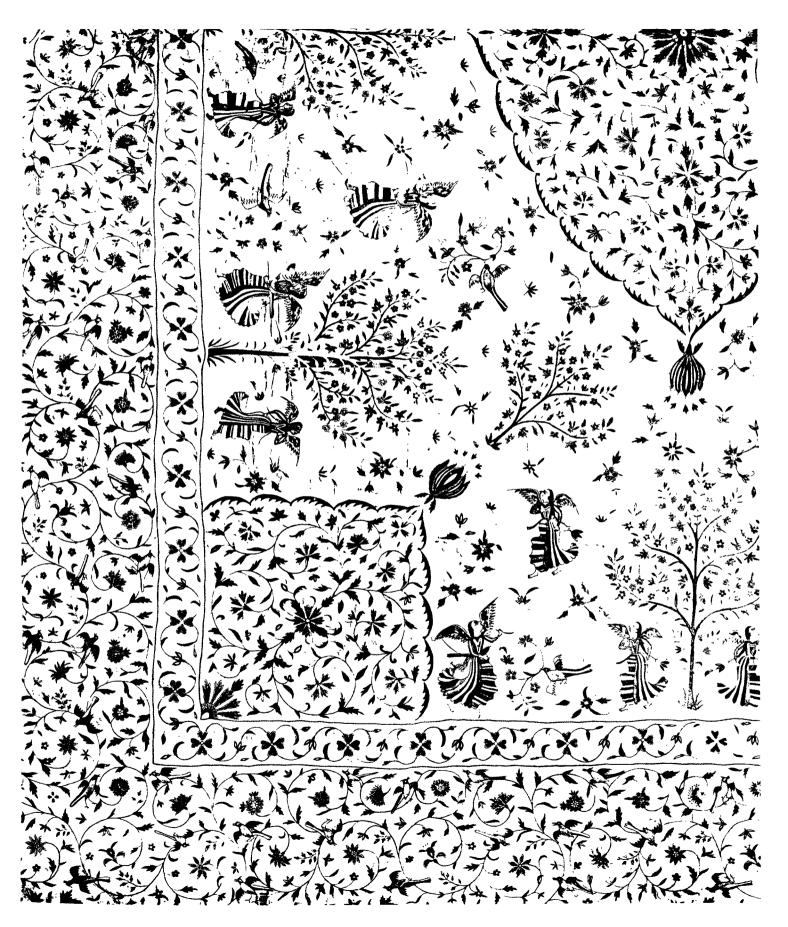
This language of image addressed itself to a people whose vision was not dulled by a one-sided bookish education, but whose senses were alert and whose minds were capable of grasping the message of form. They did not live divorced from contact with nature, shut up in factories and cheerless prison-houses of cement and steel. They lived with their bare feet on the bare ground, their heads bare under the open firmament. They lived in constant touch, physically and emotionally, with all the elements of nature, with the powers of earth and heaven. To their eyes and minds infinite cosmic backgrounds were ever present. Their feeling was nourished and

their imagination kindled by the subtle harmony of forms in nature, and they knew the laws that produced such harmony. These people handled the raw materials of the earth, not machines and machine-made articles, and in obedience to the natural laws of harmony created objects of beauty for their gods and for themselves. Their knowledge of form was thus born of experience, renewed every day and gathered up through generations, and it gave truth, substance and plasticity to their thinking and feeling. It endowed them with creative imagination, which was capable of translating any natural form into an analogy, into a symbol of deeper significance. Out of such unity with the forces of the cosmos "pratīka" was created and understood.

From all this it will be readily inferred that sacred art in any tradition, as long as it was alive, could never have amounted, as it is so often gratuitously assumed, to a mechanical repetition of pre-established patterns. Even if sacred imagery had necessarily to adopt certain formulae with respect to the lineaments, proportions, colours and attributes of divine figures, these formulae were never arbitrary. They rested on the transmitted experience of transcendent vision, a source from which flow innumerable rivers of realisation. Artistic realisation can no more result from thoughtless acceptance of patterns, than spiritual realisation can follow from merely conventional worship. No valid or vital work can be accomplished unless the worker plunges himself into that primary source and there visualises the object of his desire. Only when he has integrated himself emotionally, intellectually and spiritually with his object, will it assume visible form in his inner self. From the depth of his consciousness he may then bring forth the forms that will best express the aspect of divinity he was seeking.

Sanskrit texts that deal with the making of images always emphasise the necessity of inner visualisation. In "The Hindu View of Art" A. K. Coomaraswamy quotes from the Agni-Purāṇa: "The imager, on the night before beginning his work, and after ceremonial purification, is instructed to pray: Oh thou Lord of all the Gods, teach me in dreams how to carry out the work I have in my mind," and from Sukrācārya: "The lineaments of images are determined by the relation which subsists between the adorer and the adored." He adds that the practice of visualisation, referred to by Sukrācārya is identical in worship and art.

If such inner visualisation of divine aspects was at all possible, it was because these craftsmen knew, through meditation and experience, the exact relationship between concept and form, between a principle and its visible expression. Through intellectual and emotional awareness of these correspondences they were able to compose the various elements of an image into that particular harmony, which would, most comprehensively, mirror the chosen aspect of the Divine.



THE COMMERCIAL EMBROIDERY OF GUJERAT IN THE SEVENTEENTH CENTURY

by JOHN IRWIN

It is probably true to say that the world-wide fame of Indian textiles from the sixteenth century onwards depended less upon knowledge of traditional Indian design than upon the skill with which her craftsmen adapted themselves to the demands of foreign taste. Sometimes the designs which sold best abroad were simply variations of traditional patterns, intended to appeal to Western fashions for the exotic. Sometimes they were composed of diverse and seemingly incongruous elements borrowed from different cultures, as widely separated as Europe and China. More often than not they were adapted straight from patterns supplied by the foreign buyer or his agent. Whatever the elements and their sources, however, the final effect—the combination of colour, rhythm and line—was always unmistakably Indian, embodying the genius of local tradition.

The Indian textiles best known abroad were of course the painted calicoes; but hardly less important than these—and yet much more neglected by the research student—were the embroideries.

When the great Albuquerque set sail from India in the year 1511 with rich gifts for the Queen of Portugal, included among them were "many women greatly skilled in needle-work." On the way home the ship was wrecked and the unfortunate embroiderers drowned; but the story remains on record to show how early was the appeal of Indian embroidery in Europe.

For the next three hundred years, embroidered goods continued to be fashionable in Europe, being shipped not only by the Portuguese but also by the Dutch, the English and the French. At first they were mainly furnishings for the bedchamber—in particular quilts and pavilions for the large canopied beds of the period, which constituted the most important article of furniture in the European household, and the one upon which most expense was lavished. In the early seventeenth century, when home comforts spread to the living room or parlour, there was a growing demand for embroidered table carpets and curtains. By the end of the century, however, these had been largely replaced by painted calicoes, and henceforth embroideries were

imported mainly in the form of piece-good material, which could be cut-up by the buyer for dress-lengths or adapted to any other fashionable purpose.

Many embroideries of this class dating from the sixteenth and seventeenth centuries are fortunately preserved in European museums and private collections, where they are usually to be found classified under the vague and often incorrect title "Indo-Portuguese". The interest and importance of these textiles to the student of Indian art history has not yet been made apparent. For the most part they are unpublished and little known; and, moreover, owing to the lack of systematic study and classification, there is always the initial problem of attribution.

In a paper recently published by the present writer, one group was isolated and shown to represent a forgotten school of embroidery which once flourished in Bengal. The purpose of this article is to draw attention to another group, equally distinctive, and to show that it represents the contemporary style of commercial embroidery as practised in Gujerat.

It is clear from contemporary records of the Portuguese, the Dutch, and the English trading companies that bulk exports of embroidery in the sixteenth and seventeenth centuries were largely derived from three areas: Bengal, Sind and Gujerat. The Bengal embroideries, as explained in the paper already cited, were distinguished in the first place by the fact that they were usually worked in yellow Tussur silk, the designs covering almost every square inch of the ground. Sind embroidery, according to contemporary accounts, was usually worked on leather—a material and technique for which this province has remained famous until recent times. Gujerat embroideries, on the other hand, will be shown to have been usually worked in bright multicoloured silks on a cotton or satin ground.³

Barbosa, who visited Gujerat in 1518, was the first European to mention a local embroidery, with the brief statement that "they make here very beautiful quilts and testers of beds finely worked." Seventy years later Linschoten elaborated upon this account, describing the bedspreads of Cambay as "stitched with silk... of all colours". He implied that they were among the commodities of his time regularly shipped via Goa to Lisbon.⁵

From the time of the first arrival of English ships at Gujerat ports, the English East India Company was at pains to acquire the local bed-spreads—a fact which indicates that they already had some fame in Europe Specific instructions were given to the factors to buy "quilts made about





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Cambay", and at least as early as 1614 (the earlier sale records are missing) bulk consignments of embroidered goods were reaching London. The Company's Minute Book of this year contains many references to the sale of embroideries at the London auctions, of which the following are typical:

"Then was putt to sale a faire quilt of white satin imbroydered with sundry colours, for which Mr. Benjamyn Henthawe buddinge £39-10-0 at the going out of the flames was adjudged yt...

Next was putt to sale a Carpet or Quilt imbroydered upon callicoe with sundrie silks for which Mr. Greene biddinge £5-15-0 had the same adjudged...

A callicoe hanginge imbroydered was then putt to sale somewhat defective and stained, for which Mr. Alderman Corkaine biddinge £5-6-8 had the same adjudged..."

Circumstantial evidence leaves no doubt that these embroideries were of Gujerati origin. On the one hand, Surat was the only Indian port at which the particular ships bringing them had called. On the other hand, it is clear that although the same ships had brought back Chinese embroideries from Bantam, the latter were of an entirely different kind. The Chinese embroideries brought to Europe in the first quarter of the seveneenth century are an easily identifiable type, corresponding with contemporary descriptions of them as velvets or coverlets "worked with gold and silver thread."

In the English records of the sales of Indian embroideries, there is no specific reference to provenance until 1618—a date coinciding with the first arrival in London of Bengal quilts. Thus, in the account of an auction held on 25th February, 1618, there is mention of a "Bengalla quilt" and a "Patania quilt" being sold. The latter term is easily recognisable as deriving from Patan, the well-known town and $t\bar{a}luka$ in Baroda, and it subsequently became one of the names by which Gujerati quilts were best known in England. A Royal Proclamation issued by Charles I in 1631 listed "quilts of Pitania embroydered with silk" among commodities which were henceforth to be permitted to be brought home by the Company's servants as articles of private trade.

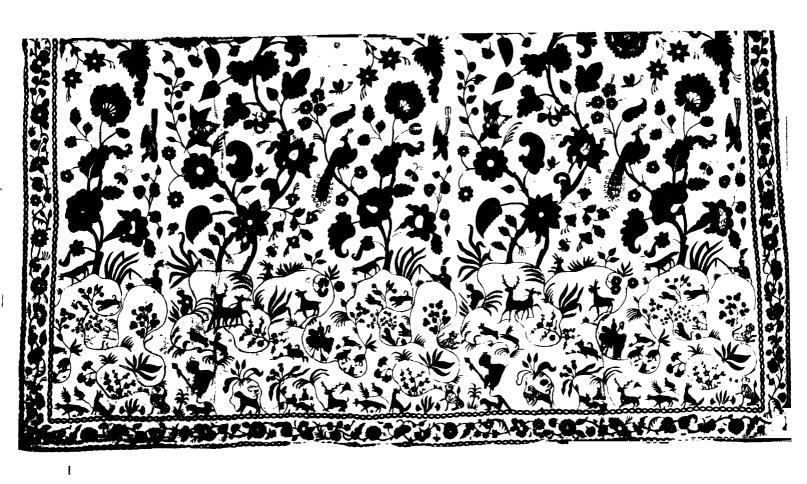
In 1662 the Dutchman, Schouten, wrote that embroidered goods were still among the principal exports of Gujerat;¹² but after this we hear nothing—until 1725, when Alexander Hamilton referred to the embroidery exports

of Gujerat as a thing of the past. "They (the people of Cambay) embroider the best of any people in India, and perhaps in the world. Their fine quilts were formerly carried to Europe. I have seen some worth £40..." From this it must be concluded that the commercial value of this industry declined sometime between 1670 and 1720.

The literary evidence quoted above leaves no doubt that the commercial embroideries characteristic of Gujerat in the sixteenth and seventeenth centuries were worked in multi-coloured silks on a cotton or satin ground. From the predominance of chain-stitch technique in surviving Gujerati folk embroidery, it might also be inferred that chain-stitching was another characteristic of the earlier commercial work. On the same grounds, bright colour schemes would be expected, with reds and blues predominating.

The works singled out here as examples of Gujerati embroidery share all these characteristics. They are sufficiently uniform in style and repetitive in subject matter and treatment to leave no doubt about a common provenance; and they survive in sufficient numbers to indicate that they were produced by an organized industry rather than in the more casual circumstances of domestic embroidery. As a final confirmation, I am fortunately able to cite one example which bears an inscription in Gujerati characters of the seventeenth century (Pl. VIII).

Among those reproduced here, the earliest is the fine piece shown at Pl. VII, which is preserved at Hardwick Hall, the famous Elizabethan manor in Derbyshire. The design consists of a central medallion with acanthus edging, and a wide rectangular border filled with delicate floral scrolls interspersed with birds. In the field there are paris with pigtails and brightly striped costumes, depicted among delicate conventional flowering trees. There are certain features of the design (in particular, the treatment of the flowering trees) which immediately recall inlay and veneer decoration characteristic of the late Akbar and early Jahangir periods;14 but even if such links were absent, it would still be necessary to consider a sixteenthcentury dating in light of the Hardwick Inventory, drawn up and signed by Bess of Hardwick in 1603.15 Most of the original furnishings described in the Inventory are still in place to-day, and very little of a later date has been added. In these circumstances, it is significant to find several Indian embroidered bedspreads included in the Inventory, and although the descriptions given are not sufficiently detailed to be able to identify among them





the piece reproduced here, it is nevertheless not improbable that it was among those listed.

A distinctive feature of the execution is the way in which certain forms (such as the paris) are composed of rainbow stripes of brightly coloured silks. This is a feature shared by many later designs belonging to the same group, as will be seen, for instance, from the treatment of the parrots in the centre of one of the hangings at Pl. VIII. The Gujerati inscription mentioned above appears on the selvage of one of these pieces, and according to Dr. Moti Chandra it reads as follows: 10

Astar jhadmāmak nā patar ga. 9. Khulat ga. 14.

The lining of $jhadm\bar{a}m$ (?). Length 9 gaz. Breadth $1\frac{1}{4}$ gaz. The term $jhadm\bar{a}m$, Dr. Moti Chandra has been unable to explain, although he expresses no doubt about the reading.

Seventeenth-century designs of Gujerat embroidery are clearly influenced by contemporary painted calicoes, many of which were in turn based upon patterns supplied by the European factors. It is not generally realized, however, that the embroiderers and the cotton painters sometimes worked from the same stencil. I had long suspected this, but had been unable to prove it until recently, when in an English country house I came across a painted hanging and an embroidered hanging based on the same stencil (Pl. IX). Careful study showed the basic outlines of the two designs to be identical, although in detail drawing and in choice of colour there were striking differences. It would be difficult to decide if the very varied motifs included in designs such as these owe most to India, China or Europe; yet there can never be any doubt that it is an Indian hand and eye which unites them, and which gives the finished design its individual strength and character.

The bedspread shown at Pl. X probably represents the end of the seventeenth-century development. The fact that it is in poor condition does the design less than justice; but even so, it could never have stood comparison with the superb Hardwick embroidery at Pl. VII, although the links between the two are obvious. By the late seventeenth century, English needlewomen had learned to produce designs of better quality than this themselves. Nor was their technique inferior. These factors probably explain why the once famous, but now comparatively degenerate, bedspreads of Gujerat passed out of vogue somewhere around the year 1700, not to be

revived again until the nineteenth century when a less discriminating public was willing to tolerate and even to admire more frankly commercial products.

- 1 Commentarios do grande Afonso Albuquerque, Lisbon, ed. 1774, vol. III, 218
- ² "Indo-Portuguese embroideries of Bengal", Art and Letters (Journal of Royal India, Pakistan and Ceylon Society, London), vol. XXVI, No. 2, 1952.
- ³ An exception among early descriptions is Marco Polo's thirteenth century account of Gujerat embroidery (which he considered "the most skilful in the world") as being worked on leather, similar to later descriptions of Sind embroidery, indicating perhaps that this was the pre-Islamic traditional technique of the whole of this part of India. See in particular the Toledo text, published under the title, Marco Polo's Description of the World, translated and edited by A. C. Moule and P. Pelliot, 2 vols., London, 1938.
 - 4 The Book of Duarte Barbosa, Hak. Soc., 1918, I, 142.
 - ⁵ Linschoten, Travels, Hak, Soc., 1885, I, 61 and 185.
 - 6 India Office Archives, Factory Records Misc., vol. 25, 19.
 - ⁷ India Office Archives, Court Book III, pp. 150. 320, 325, 391, 499, etc.
- ⁸ The Company's auctions were conducted according to the system known as "sele by the candle". An inch of candle was lighted at the start of bidding, and the final price was determined by the highest bid on extinction of the flame
 - 9 The Voyage of Sans, Hak. Soc., 1900, p. 216.
 - 10 India Office Archives, Court Book IV, 135. (London).
 - 11 Public Record Office State Papers 45, vol. 10, No. 150.
 - 12 l'oyage de Gautier Schouten, Amsterdam, ed. 1808, I, 400 and 407.
 - 13 A. Hamilton, New Account of the East Indies, London, ed. 1930, vol. I, p. 86.
 - 14 K de B. Codrington, "Mughal Marquetry", Burlington Magazine, vol LVIII, 1931.
 - 15 The Hardwick Inventory, which is unpublished, is preserved in the Library at Chatsworth, Derbyshire.
- ¹⁶ The inscription was photographed at the Victoria and Albert Museum, and prints can be ordered by quoting Negative No. H 589.

ILLUSTRATIONS

(A part only of each textile is shown in the reproduction

Pl. VII. Part of bedspread: cotton, embroidered with coloured silks in fine chain-stitch. Gujerat, late 16th century.

Collection of the Duke of Devonshire, Hardwick Hall

Pl. VIII. Hangings: cotton, embroidered with coloured silks in fine chain-stitch. From Gujerat, 17th century.

Collection of Lady Ashburnham, Ashburnham, Sussex.

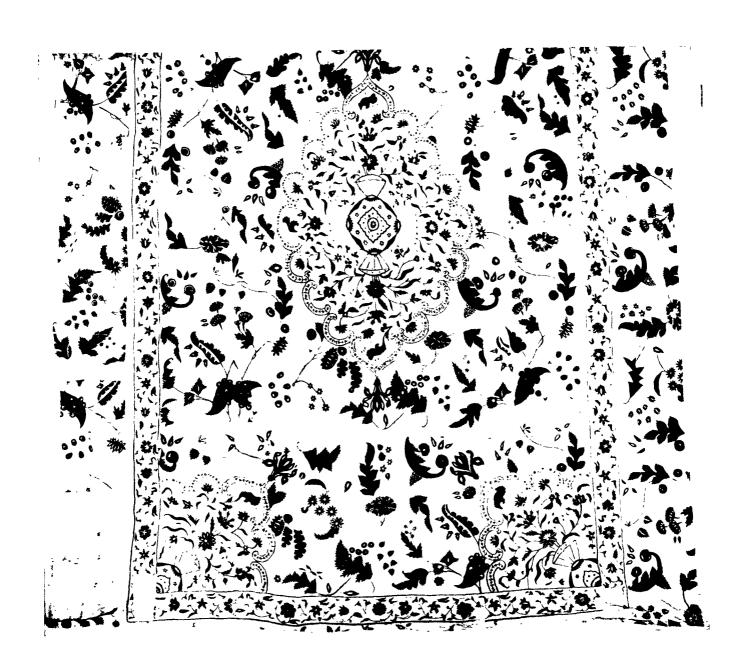
- Pl. IX, 1. Hanging: cotton, stencilled and hand-painted. Made from the same stencil as that used for the embroidered hanging at Plate IX, 2. From Gujerat. 17th century.

 Collection of Lady Ashburnham, Ashburnham, Sussex.
- Pl. IX, 2. Hanging: cotton, embroidered with coloured silks in fine chain-stitch. From Gujerat, 17th century.

Collection of Lady Ashburnham, Ashburnham, Sussex.

Pl. X. Bedspread: cotton, embroidered with coloured silks in fine chain-stitch. Gujerat, late 17th century.

Victoria and Albert Museum, 303-1900.



PRIMITIVE INDIAN ARCHITECTURE

by BENOY GHOSE

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1. THE HOUSE IS A TOOL AND A SOCIAL PRODUCT

The house is essentially a tool, an artificial protective device, without the aid of which the world-wide distribution of mankind and the diffusion of human culture that we see at present, would not have been possible. As an extra-corporeal tool, unlike the corporeal hereditary tools of animals, it can be modified to meet varying conditions and needs and adapted to a wide range of climates. As a tool the house is also a social product, and the rules for making and using it are preserved and handed on by a social tradition. As a tool it can be standardized and specialized and all its improvements and modifications can be stored and transmitted as a cultural heritage.

2. THE HUMAN HOUSE AND ITS SUBHUMAN COUNTERPART

Every extra-corporeal tool invented by man reveals a history of his increasing adaptability and efficiency and the house illustrates this principle as well as any other object of man's material culture. But in one respect the house is probably unique. All other material inventions and artificial devices of human culture originate exclusively in human experience. No animal, not even man's primate ancestors, has ever been found to chip or hammer a stone with deliberate intent to fashion a tool out of it. They may use a stick, a stone, the branch of a tree or even a solid fruit as a ready-made device, but they have never been known to transform the raw product into something new by conscious and purposeful effort. The house, however, is the only exception to this rule. Its counterpart is fairly widespread in the animal kingdom, and birds and insects often surpass the skill and ingenuity of human architects. The nests, shelters, hives, heaps and various other artificial structures in the subhuman world are wonderful specimens of architectural skill.

Primitive man probably inherited from his primate and other distant

ancestors a tradition of nest-building that he could easily adapt to his need and environment. It is not possible to trace any remains of man's earliest efforts to provide shelter for himself, since the earliest representatives of mankind could have used only perishable materials for the construction of such shelters. But it is very likely that primitive shelters were of the crudest character, little advanced beyond the nests that the anthropoid apes construct for themselves in the branches of the trees. The temporary shelters of the food-gatherers and hunters all over the world, and in India of the Andamanese, of the South Indian forest tribes like the Kadar of Cochin State, the Mala-Pantaram of Travancore, the Paliyan of Madura, the Chenchus of Hyderabad, the Veddas of Ceylon, the tree-houses of the Urali of Southern India and the Garos of Assam like the tree-houses of New Guinea and the Philippines, strongly suggest this human adaptation of subhuman device in the construction of shelters.

3. THE FAMILY, PROPERTY AND THE HOUSE

Man might have inherited the tradition of "house-building" from his primate ancestors to fulfil one of the most fundamental and universal needs—the need for protection from unfavourable natural climate, and the house provides an artificial climate in which not only greater comfort is possible, but also upon which, in certain exceptional circumstances, human existence itself depends. But man's need for shelter is far greater than that of animals, because the human organism by itself is far less equipped to meet the rigours of Nature. The natural protection that other animals have in their bodily accessories is almost hopelessly inadequate in man, who seems to have evolved in a warm climate where such accessories were unnecessary. Hence the human necessity for shelters is far greater than that of his subhuman ancestors and this necessity has driven man to invent a variety of 'types' of this essential tool—the house—that is, various types of houses to suit varying environments, to which subhuman world can hardly afford any parallel.

Apart from this physical shelter which a house provides, it also serves another universal human need—the need for the protection and storage of food and personal or communal property, that is, tools and other belongings which man treasures. If shelters and houses were not needed for man's physical protection, they would still be necessary to protect, to

store and to house his personal or communal tools and belongings and, above all, his food. No such necessity arises in the animal world.

Over and above this shelter which a house provides to human physique, food and personal or communal property, perhaps the most significant human need or urge which the house satisfies is the need for family privacy. To be more precise, it is better to say that it is the need for sexual privacy which the house serves. A primitive human "family"—the simple and universal "social group" or "unit" consisting of parents and children—where the care of the children is both "tribal" or "societal" and "parental" or "familial",—the family unit would tend to be reduced to a conjugal or sexual unit, and the arrangement of the dwelling of the family is likely to be made with an eye to sexual privacy and untrammelled courtship between husband and wife. Such need never arises in the animal kingdom.

4. THE HUMAN AND SUBHUMAN "FAMILY" AND THE "HOUSE"

The nucleus of the societies of the apes and monkeys is the family party, consisting of an overlord and his harem, held together primarily by the interest of the male in his females and by their interest in their young, though paternal interest is not so strongly expressed by subhuman primates. It is the harem which forms the nucleus when several family parties unite to form a larger herd, but the herd never appears to be so stable a unit as the family, which never loses its identity within the larger group. In the life of these subhuman primates, a crude picture of a social level is discernible, from which emerged our earliest human ancestors and upon which they probably modelled their earliest social life, somewhere in the first half of the Tertiary Geological Epoch.

Zuckerman, one of the greatest authorities of Mammalian Sociology, says that the polygynous gorilla or baboon can guard his females from the attention of other males while they forage together for fruits and shoots, but primitive man would not have gone hunting if in his absence his females were abducted by his fellows. We can, therefore, conclude that reason, probably guided by the demands of man's omnivorous diet and the smallness and isolation of groups, might have forced the compromise of monogamy, with tendency towards sexual communism, often unexpressed, on the Palaeolithic society. In the Neolithic society, with the growth of larger

communities living peacefully together, this tendency found opportunities for expression and in many parts of the world, not necessarily everywhere, it became the starting-point of group-marriage. The picture of the most primitive "social group" or "family" which emerges out of this is, therefore, the picture of a free and unfettered sexual relation between husband and wife and the prolonged parental care of their children. This sexual life of man is something essentially different from that of the subhuman primate. Human sex-life cannot bask in the sunshine of public or communal life. man and a woman must meet and mate together at a place where he and she are completely free as individuals to give and take. Communal life may, at best, contribute sexual energy to individuals, but the individuals need a private life of their own for the liberation of that energy, both individually and socially. The sanctity of sexual life of primitive man demanded a house, a room, or at least a specifically allotted space, even in a Palaeolithic cave. Fairly large communal caves have been found where such well-defined spaces are assigned to individual family-units comprising a group. At Kostienki on the Don river, Soviet excavators recently unearthed a big Palaeolithic house, 113 feet long and 18 feet wide, where a row of nine distinct fire-places down the centre suggests that it was a communal abode of a group of nine families. Among the Veddas of Ceylon, whether staying in a 'private' or 'communal' cave, the family life continues in much the same pattern. Seligmann reports: "If in a communal cave, each family keeps strictly within its own limits, the woman may always be seen at exactly the same spot, and when the men come in they sit or lie beside their wives, keeping to that part of the cave floor that belongs to them as carefully as though there was a partition dividing it from that of their neighbours".5 Figure 6, Plate II is a plan of the big Pihilegodagalge cave of the Veddas, the communal abode of a group of five families, showing the actual division of floor space.

5. THREE FUNDAMENTAL NEEDS WHICH A HUMAN HOUSE SERVES

The foregoing facts clearly indicate that the dwelling house has served three fundamental human needs since the dawn of human society—

(i) The need for protection from weather and enemy (generally beasts);

- (ii) the need for storage of food and property, personal and communal, and
- (iii) the need for free family life and sexual privacy.

As these needs can be grouped as (a) the need for self-preservation and (b) the need for reproduction, they may be broadly called "biological needs". A house which does not fulfil these basic biological needs is not worthy of being called a "dwelling house".

6. THE HOUSE IS A "CULTURAL SUPERSTRUCTURE"

The house is a tool invented by man to help him in his adaptation to his environment. But the needs of man are not determined by physiological drives alone, they are determined under conditions of culture also in a more or less round-about process. "Culture" is not simply an "instrumental reality", an "apparatus" for the satisfaction of fundamental needs. It is a total dynamic reality in which physiological, economic, political, religious, educational and aesthetic needs-and-responses are all combined and integrated. The house does not serve "biological needs" alone, but satisfies other "cultural needs" also. The house, in this sense, is both a "material tool" and a "cultural symbol". It is founded upon the primary biological and economic needs, and is structured and roofed with the secondary or derived socio-cultural needs—religious, educational and aesthetic. In this sense, the dwelling house is not only a tool' of culture, but also a 'cultural superstructure'.

II

7. ENVIRONMENT AND THE DWELLING HOUSE

There have been men like us in the world since the closing stages of the Ice Age, probably since the dawn, making mighty efforts to alter and adapt this earth to their conscious purposes. And as man presumably evolved in a tropical forest area like the rest of the primates, we cannot altogether exclude India, especially the Himalayan regions, as "one of the stages" where the opening scenes of human history might have been enacted.

The role of the dwelling house as a tool, along with the earliest eoliths and palaeoliths, must have been very great in these opening scenes of human history in India because, without the tool of a 'shelter', natural or artificial, the struggle for existence would not have been possible at all and efforts could not be made by man to alter and adapt the landscape to his needs.

The importance of man and his culture in relation to the environment has been emphasized by all human geographers. The types of houses built by primitive peoples differ widely, being completely dependent upon the type of the "cutting tool" which the people possess and on the type of "landscape" in which they live. In the dry lands or deserts, no sedentary life is possible and houses, therefore, are nothing but mobile "tents". Sedentary human population is intensely concentrated in oases. tropical forest and mixed forest lands, both "permanent" and "temporary" houses are constructed with wood and leaves, in accordance with the varying needs of the economic life of the hunters and collectors, shifting and settled cultivators. In treeless grasslands, pastoralists and hunters make tents of skin or felt and carry wooden poles as tent frames. In arid lands settled agriculturists make their permanent mud houses or houses of brick and stone. In the polar lands the people make "snow houses" of which the "igloos" of the Eskimos can be mentioned. In the mountain lands permanent houses can be built with local forest materials by people practising both "terraced" and "slash-and-burn" cultivation. The materials of housebuilding vary from one environment to another, and so far as materials influence 'design' or 'shape' of a house, a particular type of environment exercises some influence on the adaptation of a particular 'type' of house.

8. ECONOMY AND THE DWELLING HOUSE

The "correlation" between the Economy, Dwelling House and the Settlement-pattern is also evident everywhere. The hunters and gatherers live a nomadic life as exploiters of difficult environments and are compelled to construct "temporary" houses. The primary nucleus of individuals who have got to co-operate economically must dwell together in space, and the size and structure of these "hordes" or "bands" determine the size and structure of the communal caves, houses and the settlement-patterns of the nomads. The herders on the grasslands, since the domestication of animals,

have been the dominant exploiters of a dull and dreary environment. The use of such an environment economically by the pastoralists involves them in ceaseless movements for much of the year, a single family moving several hundred miles in the course of a year in quest of fresh pastures and water sources. In favourable seasons they live a semi-stationary life for a few months in houses, often rectangular, built of withies and reeds and covered with earth or sods, but the portable tent covered with felted material is their more dependable dwelling house. The cultivators and farmers who have established with the landscape a state of equilibrium, are rooted to the soil and live a stationary life in permanent houses and settlements. But some farmers are mobile, those who depend on some sort of "mixed economy", though they move less than pastoral nomads, much less than the hunting and gathering peoples. Nearly all farmers in tropical lands practise a sort of shifting cultivation with axe and digging-stick or the hoe. Vast areas of primeval forest have been altered by these peoples. A cluster of semi-permanent huts grows near the land and when the land is exhausted. the huts are deserted. A new cluster of huts is built and a new area of forest is exploited. This might have happened in the beginning, but the shifting cultivators, as they are found in India now, do not desert their settlements. There is more or less a 'fixed' settlement-pattern of the shifting cultivators in India. The settled farmers who have more perfectly adjusted their way of living to the landscape with improved tools of production, can afford to build more solid and permanent dwelling houses.

The role of the *economy* in the shaping of the "forms" of houses, the "pattern" of the settlement or the "assemblage" and "aggregate" of the houses in villages, towns and cities is, therefore, of supreme importance. The houses and the settlement-patterns are important from this point of view as socio-economic and cultural patterns of life.

9. THE INFLUENCE OF ENVIRONMENT AND ECONOMY ON THE DWELLING HOUSE IN INDIA

The influence of Environment and Economy on the house-type and settlement-pattern is therefore important. India affords richest materials for the study of this influence as India probably presents a greater variety of geographical and economic conditions, actions and features than any other area of similar size in the world. In these geographical conditions,

various tribes and peoples of India have been living since the dawn of history, exploiting the variety of landscapes and adjusting their ways of life to them through different economic stages of society. Their house-types and settlement-patterns cannot be exactly described today, as the original forms and patterns have been possibly modified in the process of "acculturation" of later ages. But "house-type" and "settlement-pattern" as culture-traits are more or less "stable" over fairly long periods of history and are not easily susceptible to modifications by culture-contacts as other material traits are. Their stability is due largely to their direct dependence upon technology, economy and environment-factors which are not easily altered by intrusions of cultures and which in India particularly, have been conspicuously stable over long periods, despite such intrusions. A brief survey of some selected "tribal" houses in India as examples of fairly "stable" types and representing different types of environment and economy, will not be therefore irrelevant here in connection with my illustration of the influence of these factors on the "house-types" and "settlementpatterns".

(A) TRIBAL HOUSES AND SETTLEMENT-PATTERNS IN INDIA

ASSAM

The Nagas: The Nagas live in the geographical region of the Eastern Himalaya, the lower zone of which is characterised by its forests of śāl and pine, a rich undergrowth of shrubs and coarse grasses, some 18 species of palms and 12 kinds of bamboos. Some of the Nagas practise a primitive method of shifting cultivation or Jhum as it is called, while others have a careful and elaborate system of irrigated terraced cultivation. The Naga houses, though not uniformly built with same materials, are almost exclusively dependent upon local resources. The Angamis have enough forest materials and they use wooden planks and posts for their houses, but the Semas employ chiefly bamboos.8 The walls of Sema houses are matted with bamboos and roofs are thatched.' The Ao Nagas build their houses with bamboos and thatch grass. Even the roof is made of bamboos. Walls are made of thin bamboo, split and plaited together. The floor is made in a like manner.10 The houses of the Lhota Nagas are also mainly built with bamboos.11 The Rengma Nagas use wooden posts, bamboos and thatch. No nails are used in fixing, everything is tied with strips of cane or bamboo.12

Hutton says: "... all evidence from the Naga tribes suggests that materials used in building are dependent on those locally available. Thus while the majority of tribes use thatching grass for roofing, the Aos use palm-leaves, 'Tokupāt', where thatching grass is scarce and the palm is common, while the Kacha Nagas and Kukis where thatch is scarce use bamboo and cane leaves. So, too, the Kalyo-Kengu, who are able to obtain slate, use that either instead of thatch or to eke out what thatch they can get. When it comes to building we find the Angamis who have timber in plenty, but little bamboo, use hewn planks to build with. The Semas with little timber, but plenty of bamboo in their country use the latter."

The "settlement-pattern" is not uniform over the entire Naga area. Sizes of the settlements vary widely from one area to another. Kohima village heads the list with more than 700 houses and it is recorded to have had 900 houses formerly. Angami villages frequently run to 400 houses or more. Ao villages also run to large numbers. Sema villages usually run to 100 houses.14 Naga settlements are usually "fenced" for defence, some as the Semas, have double fence with a ditch between. Morungs or village dormitories, perhaps the finest of all Naga houses, are generally located in front of the gate or entrance of the village. Naga settlements are generally of "compact type" and the patterns are both linear and amorphous. The Ao and Lhota settlements are of the "linear" type. The regular central streets and the closely-serried houses on both sides, give the impression of something permanent and compact. The houses are so close together and the path in some places so narrow that the gables of the houses on opposite sides overlap overhead. ¹⁵ Sema settlements are "agglomerated" but "amorphous", the houses are scattered and loose, the arrangement is not "linear".16 The Angamis have no separate cattle-pens or granaries but the Semas keep their cattle outside their village and they have, like the Lhotas, a separate collection of granaries, little huts in rows raised from the ground and usually placed at a short distance from the dwelling houses to secure them against fire. It appears that among the Nagas, the "settlement-pattern" of the shifting cultivators tends to be "agglomerated" and "amorphous" and that of the terraced cultivators "compact" and "linear". Physical features and the problem of 'defence' have also lent much to the adoption of the "linear" pattern in the Naga Hills.

The Garos: The home of the Garos is a mass of dense irregular hills, 2000 ft. to 4000 ft. high. Rainfall is very heavy. Hills are densely wooded and bamboos are available in plenty. The Garos always build their houses on piles for protection and if possible on steep incline. Houses are built mainly with local bamboos. The walls are made of bamboo matting and the roofs are substantially covered with thatching grass, bamboo-leaves or cane-leaves. Almost every Garo possesses two houses,—one in the village and the other in his field for cultivating season. Field-houses or borangs as they are called, are often built high up in the trees in order that the inmates may be safe from elephants.¹⁸

The settlement-pattern of the Garos is agglomerated, amorphorus and semi-nuclear. Houses are arranged with some show of order around irregularly shaped open space called "atela" or "sara"—which is common to all. It may be a survival of an older ring-fence type of settlement, which developed in forest areas around clearings in the forest. The "nokpante" or village dormitory is placed in the centre or at one end. Here all strangers are accommodated and village meetings are also held. Outside the ring of the houses, like some of the Nagas, there is a collection of smaller huts or granaries in which paddy is stored in large baskets made of bamboo-strips.

CHOTANAGPUR REGION

The Birhors: Both the Uthlu Birhors or hunters and collectors and the Jaghi Birhors or settlers, have settlements called tandas, each "tanda" having about half-a-dozen huts. In the 'tanda' of the Uthlus the huts are mere improvised leaf-shelters in the form of low triangular kumbas. Smaller 'kumbas' are called chu-kumbas and larger ones ora-kumbas. Jaghi huts are also made of branches covered with leaves, but have better walls, some made of branches plastered with mud and few wholly of mud. The settlement-pattern of the Birhors is determined by the size of the "tandas" or "food-groups" and the houses are all built with locally available materials. 19

The Mundas: The Munda houses are supported by wooden posts and have tiled roofs, but poorer Mundas thatch their houses with sauri, a kind of grass locally available in plenty. The posts and rafters are generally

made of sal wood obtained from the local jungles. The walls are generally of mud, but sometimes, specially in Western Parganas, walls of split bamboos are found. Windows are absent. For 'ropes' used in house-building, the Mundas gather "chop" or the fibre of a creeper growing wild in the jungles. Occasionally a little hemp called jiuri is grown for making ropes with.²⁰

The settlement-pattern of the Mundas is agglomerated, amorphous and nuclear. Munda homesteads are huddled round the central Ākhrā—"an open space under some old wide-spreading tree." The survival of an older "ring-fence type" of settlement around clearings in forest may also be traced here. In this Ākhrā public meetings, panchāyats and village festivals are held.

The Oraons: The Oraon houses are also the products of their local environment. S. C. Roy says: Climatic control may also be traced in the material and construction of the Oraons' huts and in the furniture he ordinarily uses. These huts have walls of mud or of split bamboos, and either sloping roofs of burnt clay-tiles or thatches of wild grass supported on posts, beams and rafters made mostly of śāl wood. Bamboos, śāl trees and wild grass grow in abundance in his native jungles and waste lands; and although stone for building purposes may be had in plenty, he prefers wood, bamboo and wild grass as these are much easier of transport and collection and as owing to the absence of dampness in the atmosphere of the plateau, these stand no risk of decomposition. To keep out the hot winds of a tropical summer, the Oraon builds his huts without windows, and to drain off the rain-water that pours in torrents in the rainy months, he makes the roofs and thatches of his huts somewhat sloping."

The settlement-pattern of the Oraons is similar to that of the Mundas and the survival of the same "ring-fence type" may be traced here also.

The Kharias: The unsettled Hill Kharias have small rectangular huts with little or no plinth. Walls are made of logs of śāl wood planted in the ground and plastered with mud. The roof generally consists of two sloping wooden frames thatched with grass or paddy-straw, supported on a few śāl posts. Settled Dudh Kharias have more substantial houses. Many houses have solid mud walls and a few are 4-thatched.²²

From about four to a dozen families of Hill Kharias constitute a settlement and the huts are 'dispersed.' There is no nucleus of Akhrā in

Hill Kharia settlements. The settlement-pattern of the Dudh Kharias, like that of the Oraons and the Mundas, is also of the 'agglomerated', 'amorphous' and 'nuclear' type.

The Santhals: The Santhals, living in the same environment and almost under same economic conditions, build their oraks or houses with the same materials—śāl logs, bamboos, sauri grass or paddy-straw and mud. Windows are absent. There are holes in the walls. The settlement-pattern of the Santhals is of the same 'agglomerated', 'amorphous' and 'nuclear' type.²³

In all these settlement-patterns of the agricultural tribes of Chotanagpur region, the survival of an older "ring-fence type" is clearly traceable.

CENTRAL INDIA

The Gonds: While residing in the centre of Hindu population, the Gonds inhabit mud houses like lowclass Hindus. But in the jungles their huts are of bamboo-matting plastered with mud, with thatched sloping roofs. The settlement-pattern of the Gonds is of the same agglomerated and amorphous type, but not necessarily 'nuclear'. In typical Gond settlements the houses are all perched about on little bluffs or other high ground overlooking the fields, one two or three together.²⁴

SOUTH INDIA

The Chenchus: The Chenchus of Hyderabad inhabit the hilly country north of the Kistna River which forms the most northern extension of Nallamalai Hills and is known as Amrabad Plateau. The Amrabad Plateau falls naturally into two definite parts, the lower ledge to the north-east with an elevation of about 2,000 ft. and the higher ranges to the south-west averaging 2,500 ft. The higher ranges are pure forest area and almost exclusively inhabited by the Chenchus.²⁵ Economically the Chenchus belong to the primitive hunting and gathering stage. They depend for nine-tenths of their food-supply on that which nature provides and only a limited number of families, by keeping domestic animals and cultivating small plots of corn and vegetables, are emerging from this lowest stage of human culture. The only division of labour in Chenchu society is that between the sexes, and economically perhaps more than socially, the family is a self-contained unit.²⁶ As the jungle Chenchus are largely dependent on the food collected

in the forest, they are forced to follow the train of seasons and of the year to leave the villages where they have their permanent houses for places with more water and plenty of edible plants and fruits, erecting temporary leaf-shelters and grass-huts. The size of the settlements vary considerably as the population is never stable. Usually the settlements of the Jungle Chenchus consist of six or seven houses and generally the kin-groups, constituting the socio-economic unit, inhabit these smaller settlements. A list of such settlements is given below: 27

Chenchu Villages on the Upper Plateau

T 1 D. 6			11 houses	10	acttlements)
Irla Penta	•••	•••	11 nouses	(Z	settlements)
Medimankal	•••	•••	7 houses		
Boramacheruvu	•••	•••	6 houses	(2	settlements)
Appapur	•••	•••	9 houses		
Rampur	•••	•••	11 houses	(2	settlements)
Bikit Penta	• • •	•••	3 houses		
Pullaipalli		•••	3 houses		
Malapur	•••	•••	5 houses		
Pulajelma	•••	•••	13 houses		
Railet Banda	•••	•••	11 houses		
Vatellapalli	• • •	•••	8 houses		
Sarlapalli	•••	•••	13 houses	(3	settlements)
Patur Bayal	•••	•••	2 houses		
Timmareddipalli	• • •	•••	3 houses		
Koman Penta	•••	•••	8 houses		

Two types of settlement-patterns can be distinguished among the sites of permanent Chenchu villages. In the park-like country of the northern side of the plateau villages are built on level clearings surrounded by tall trees. The houses are generally arranged in a rough crescent, often open to the east, with a tendency for the blood-relations to build their houses together. The other type is found on the stretches of naked rock and the arrangement of the houses in this type of settlement is adapted to the surface of the rock formation. While the houses of these villages are generally built solidly with a circular wattle wall and a conical thatched roof, a great variety of huts and shelters ranging from small, roughly

conical gress-huts to one-sided leaf-shelters, are found in the temporary settlements.28

It is interesting to observe the process of "adaptation" and "acculturation" of the "village Chenchus", as they are called by their kinsmen living in the jungle, dwelling in the plains villages between Lingal and Achampet and in the villages in the westernmost part of the Amrabad ledge. In these settlements the houses are built of solid mud with roofs thatched with grass. Some have retained the round shape and conical roof of the traditional Chenchu dwelling, but others are rectangular like those of the local Telugu peasantry. Here the Chenchu houses are grouped in twos and threes round a common courtyard, with walls painted in red and white in the manner typical of the Telugu country. "Culture-contact," as one of the causes of disappearance of the circular form of dwelling house in India, may be traced here among the "village Chenchus".

The Todas: Malabar, with its humid climate, closely resembles the eastern part of the Gangetic plain and most deltaic regions in luxuriant vegetation. It has loftier trees and more palms, its shores skirted with cocoanuts and its villages surrounded with Betelnut palm and Talipot groves. Here the Nilgiris (the name has probably been derived from the lovely expanses of the blue flowers of a kind of shrub growing here) rise precipitously from the west to extensive grassy downs and table lands seamed with densely wooded gorges, locally termed "sholas" and filled with evergreen forest. Usually it is near these sholas that Toda settlements are found. Toda houses are mainly built with bamboos closely laid together, fastened with rattan and covered with thatch, all local materials. Toda settlements or villages are called mads. The settlement-pattern is of the 'agglomerated' and 'amorphous' type. The mad consists of a small group of ars or huts and mads are scattered about the hills. There are dairies in the villages near the huts or commonly at a little distance. The plenty and variety of local vegetation has stabilised the pastoral economy and cattle-keeping of the Todas and they have settled into stable mads.30

The Veddas: The wilder forest Veddas of Ceylon built no houses in old days, but lived entirely in caves on hunting and gathering. Today they have settled down to "chena" cultivation, which is a sort of "slash-and-burn" agriculture. The Hennebedda Veddas, one of the descendants of the forest Veddas, make 'chenas' on which they temporarily live in back-covered huts.

They very often leave their chena-settlement and hunt and gather honey, living during such times in rock shelters within their own hunting boundary.³¹ The houses of other groups of Veddas range from natural rock-shelters and simplest rough shelters consisting of trimmed overlaid branches of trees, to the windbreak-type and triangular tent-like houses. The houses are all constructed with locally available forest materials—the palm-leaf, the banana-leaf, the lotus-leaf, the bark of trees and grass etc. The size and pattern of their permanent and semi-permanent settlements are determined to a great extent by their economy of hunting-gathering and chena cultivation.³²

HIMĀLAYAN REGION

The Bhotiyās or Bhots: The Bhotiya tract comprises the five inter-Alpine valleys of the Himalayan range bordering on Tibet. These are all situated at heights varying from 10,000 ft. to 13,000 ft. above sea-level. There are about 50 centres of population in the five valleys of varying altitudes, of which the following are important:³³

Lwan* in Johar	•••	•••	19,000 ft.
Kuti in Byans	•••	•••	12,330 ft.
Milam in Johar	•••		12,330 ft. 11,706 ft.
Bungnal in Darma		•••	•
Niti in Garhwal	•••	•••	11,650 ft.
Martoli in Johan	•••	•••	11,464 ft.
Go in Darma	•••	•••	11,070 ft.
· ·	•••	•••	11,000 ft.
Mana in Garhwal	•••	•••	10,560 ft.
Garbyang in Byans	•••	• • •	 10,320 ft.

All these habitations bear the indelible stamp of their environment. Man's remarkable adaptability to his regional environment may be profitably studied here. Brought up in these bleak and brutal lands, the Bhots are not only brave and stern, but also nomadic in their habits, spending

^{*}The highest known habitation of the world, according to Brunhes. is in Maritime Cordillera, Peru, at a height of 17,100 ft. above sea-level; but the Himalayan habitation of Lwan is some 2,000 ft. higher. According to Dr. Pant. Lwan is the highest habitation in the world.

S. D. Pant: The Social Economy of the Himalayans, Chap. II, p. 41 f.

only a month or two in their settlements. Bhotiya houses and camps are all built with local materials. They have two sets of dwellings, Johari Bhotiyas have three sets, in addition to the portable tent used in the intermediate stage. When migrations take place, everything is carried up and down and there are three distinct varieties of migrations among the Bhotiyas. The following is the general order of migrations: 34

April-May: First trip upward of traders with goats and mules.

May-June: Second trip upward of traders.

Mid-June: Movement of Families with jibus etc.

June-July: Movement of Camp-followers.

Mid-September: First trip downward.

End of September: Second trip downward.

October: Families descend.

Here, in the cruel Himalayan regions, environmental and economic determination of the dwelling-house and the settlement-pattern of the Bhotiyas, appears to be more rigid.

(B) NON-TRIBAL HOUSES AND SETTLEMENT-PATTERNS IN INDIA

To try to give an account, even roughly, of the houses and settlement-patterns covering the whole of non-tribal India, when 'data' are inadequate, is really hazardous. Yet an attempt will be made here in the hope that out of this survey, though sweeping, something may emerge to indicate at least the relation of the environment and economy to the dwelling house and the settlement-pattern in India. We are leaving out of account those regions or zones, particularly cities, towns and prosperous suburban villages which can draw upon modern scientific resources of technique and transport in building activities. In the survey which follows we shall start from Bengal and proceed southward along the Eastern coast through Orissa, Andhradeśa, Drāviḍadeśa and then move upward along the Western coast through the Bombay Presidency and Gujrat, step into Madhya-pradesh (C.P.), Uttar-pradesh (U.P.), skirt Bihar and stop at Punjab.

Bengal: In East Bengal the houses are mainly built with bamboos and thatched with paddy-straw and grass, all local materials available in plenty. Tin is also used for roofing now-a-days. Walls are made of plaited

and chipped bamboos, woven into different designs. Houses are generally rectangular and roofs are 'sloped'. In West Bengal houses with complete mud walls and thatched roofs are frequently seen. Roofs are generally thatched with locally available paddy-straw or grass. Sometimes 'khola' or 'tile' is used, as in some areas of Howrah district. The convex-curve of the heavily thatched 4-roofed houses in West Bengal tends to assume a "round" shape. The homestead-plan of West Bengal is similar to that of East Bengal, which is generally an open courtvard surrounded by isolated huts of a single family or joint-family. But the settlement-patterns differ—in East Bengal the homesteads are usually "dispersed" in the midst of fields. in West Bengal they are 'agglomerated' and 'amorphous'. In the "bhāti" or low areas of East Bengal districts, 'settlement-pattern' takes the form of a line or series of lines consisting of dwelling houses, particularly along the river-line. These resemble "linear pattern" of settlements very closely. In Svlhet this type of settlement is known as "hāti bāndhā". In Sylhet, Tipperah, Dacca, Faridpur and Mymensingh, in low regions where floodmenace is a regular physical feature, such "linear pattern" with strong bamboo fences is adopted for the protection of the houses in the settlement from the flood-waves of the river. In the Kāchār district, while the Kāchāri and Burman bastis are generally "amorphous", the Manipuri bastis are of "linear" pattern and "compact" type. Here the 'linear' and 'compact' pattern of the Manipuri bastis appears to be a development centering round the road.

In the non-tribal areas of Assam, the Asamiyas are very 'thinly' scattered in 'amorphous' settlements.

Orissa: In Orissa the houses have generally mud walls and sloped thatched roofs. They are mainly rectangular in shape. The homestead-plan does not essentially differ from Bengal's and the settlement-pattern resembles West Bengal's agglomerated and amorphous type. But in South Orissa (in Puri, Cuttack, etc.) settlements called "sāsaniyā grāma" or "Brāhman grāma" are found, having a strictly "linear" pattern. Houses are arranged in continuous rows along the sides of a central street. As we have already noticed, such "linear" patterns are found in the settlements of some of the Nagas in Assam, in the bhāti or low areas of East Bengal and therefore nothing definitely can be said in favour of its innovation and imposition by the Brāhmins in India. "Linear" pattern of settle-

ment is also found in some portions of Manbhum, especially those adjoining Orissa.

Andhradeśa: In Andhra, the houses in jungle area are all built with wooden posts and bamboos. Walls may or may not be plastered with mud. In plains, houses with simple mud walls are frequently found. Roofs are thatched with palm-leaves or grass on wooden frame. The circular-type of house is also found here distributed mainly along the coastal region. The settlement-pattern is generally of the "agglomerated" type.

Drāvidadeśa: In the Tamil country the houses have ordinary walls, but the roofs are tiled. Houses are "rectangular" in shape. Tiles are laid 2 or 3 deep, fixed with mortar, having "spines" at regular intervals.

Bombay Presidency: In South Bombay Presidency (Belgaum, Bijapur, Dharwar etc.) where rainfall is low the houses are flat-roofed and walls are made of mud and local stone. In Gujrat the houses are rectangular with sloped tiled roofs.

U.P., C.P. and Bihar: In U.P., C.P. and Bihar the houses have sloped tiled roofs and mud walls, but the orderly homestead-plan found in Bihar is generally absent in U.P. In Western U.P. where rainfall is low, the houses are all flat-roofed. Roofs are covered with earth on horizontally laid planks and walls are made of mud.

Punjab: In the rainy Kangra district of Punjab, rectangular thatched houses with sloped roofs are found, but elsewhere the houses are flat-roofed as in Western U.P. In some portions of Kangra district, both "sloped" and "flat-roofed rectangular houses are found in the same "settlement" and even in the same "homestead".

10. THE DWELLING HOUSES AND SETTLEMENT-PATTERNS IN INDIA AND THEIR RELATION TO ENVIRONMENT AND ECONOMY

Some important characteristics of the dwelling houses and the settlement-patterns in India emerge out of the foregoing survey of some tribal and non-tribal regions, of which the following are notable:

- (i) Houses are generally built with locally available materials, such as bamboo, wood, straw, grass, different kinds of leaves, mud etc. Stone is used where it is locally available.
 - (ii) The tendency to depend exclusively on local materials is clear-



ly revealed in the use of local jungle creepers, such as 'chop' and 'jiure' (Chotanagpur), strips of cane or bamboo (Assam and East Bengal), 'Rattan' (Todas of Nilgiri Hills), jute fibres etc., as ropes for knotting purposes.

- (iii) Houses have generally "sloped" roofs in regions of normal, moderate and heavy rainfall, whether "thatched" or "tiled". Roofs are thickly thatched in places of heavy rainfall. Where rainfall is below normal, as in South Bombay Presidency, Western U.P., Punjab (except Kangra Dt.), the houses are generally 'flat-roofed'.
- (iv) Houses in India are predominantly "rectangular" in shape with 'sloped' roofs. "Round" form of dwelling houses are now found in some regions of Andhradesa. The houses of the Chenchus are generally round and conical. Todas live in half-a-barrel shaped houses. Some Naga houses have semi-circular fronts. Heavily thatched convex-curved roofs of West Bengal huts clearly resemble 'round' form. No positive correlation, in the present state of our knowledge, can be established between the 'round' form of dwelling house and the surrounding environment or the prevailing economy of the people in India.

The correlation between the economy and the settlement pattern is found to exist roughly in the following way:

- (i) Some sort of 'amorphous' and 'agglomerated' type of settlement-pattern is found to exist among the hunters and collectors, like the Uthlu Birhors, Hill Kharias and the wild Forest Veddas. This pattern may be called 'nuclear' in the sense that the huts are grouped round the nucleus of a well, a tree, a sacred grove, a shrine or a common dancing ground.
- (ii) Most of the settlement-patterns of the settled agricultural tribes like the Garos, the Mundas, the Oraons, the Kharias, the Santhals etc., resemble an older "ring-fence type". It may be that they represent a survival or later development of an older "ring-fence type" of settlement which developed in forest areas around clearings in the forest. The settlements of the jungle Chenchus clearly indicate this course of development of the settlement-pattern from the older ring-fence type to the nuclear but amorphous, semi-circular or linear type.
- (iii) It appears that physical features and the problem of 'defence' have lent much to the adoption of the "linear" and compact type of settlement-pattern, as is found in some parts of the Naga Hills and in the low

regions of East Bengal. The origin of the "linear" type of Brāhmana-grāma found in South Orissa may be traced back to those days when the Aryan-brāhmans first established their settlements in the midst of hostile "mlecchas" or predominantly non-Aryan people of Eastern India. The problem of 'defence' might have forced the Brāhmans to adopt the 'linear' type of settlement-pattern in the manner of some pre-Aryan tribes and traditionally, therefore, this type of settlement is still known as Brāhmana-grāma or Sāsanīya-grāma in this part of India.

These are some of the important characteristics of the dwelling houses and the settlement-patterns in India in relation to the prevailing environment and economy of the people in different regions.

III

11. SURVEY OF VARIOUS "FORMS" OF DWELLING HOUSES

Shapiro, in his valuable monograph Homes Around the World, includes all kinds of man-made shelters as "houses" and classifies them into the following basic forms: ³⁵

- (i) Open Shelters: Lean-to's and Windbreaks.
- (ii) Circular House: Beehive, Conical or Dome-shaped.
- (iii) Rectangular House: Pitched or Flat-roofed.

Variations and elaborations of these basic forms are numerous. In this classification, caves are not included, because they are natural phenomena, not man-made constructions. It must be remembered also that the cave is not our primitive ancestors' first solution to housing problem. Prehistoric archaeologists have, of course, dug out many of the earliest tools and belongings from the caves, but that does not prove that the cave is the earliest shelter used by man. The fact that more material evidences of prehistoric home life have been found in open places than in caves, indicates that the windbreaks and lean-to's and other types of houses derived from them, are the most common forms of dwelling houses in prehistoric times.³⁰

Open Shelters: Windbreaks and lean-to's are the most common types of open shelters. They may consist of simple structures of trees or

branches stuck into the soil to form a straight wall or semi-circular enclosure. The framework is covered with leaves, grass, bark, skin or some other suitable material. They may also be a very simple wall to deflect the wind or it may be a lean-to type where the wall is inclined to form a half-roof. These houses or shelters which are of the most primitive character, are widely distributed. It is at best a "makeshift" and provides only a temporary shelter to nomads living in warm climates, where its ability to shed rain and deflect wind justifies its prevalence.

Circular Houses: The circular and the rectangular houses are fundamentally different in their structures. The roof of the circular house may be a continuation of the walls, sloping inward. This type of construction simplifies the problem of the roof and the circular house naturally becomes the desirable form under primitive conditions. Circular houses with distinct roofs and overhanging eaves would, it seems, limit the size of the house in the beginning, since too great a diametre would create construction problems of considerable magnitude. There are many variations of this basic circular form of house—the beehive type, the dome type, the conical type, the umbrella type, the semi-circular type etc. Leaves, grass, mats and barks can generally be used for roofing. The skeleton or structure may be a simple one of poles, interwined branches or of horizontal sticks tied to verticals stuck into the ground.

Rectangular Houses: The rectangular house allows greater floor space and more headroom and, therefore, represents a widely adaptable form of dwelling house. This form of house may be extended and enlarged with the technical skill of the primitive builders and becomes, therefore, the preferred form in the major portion of the primitive world. In rectangular constructions one of the great problems is to protect the break between the roof and the vertical wall from leakage. In dry regions a flat roof may be adequate, but in areas of abundant rainfall the roof must be sufficiently sloped to allow water to drain off quickly. It is necessary also to shield the top of the wall from absorbing moisture directly from the rain or the run-off. The roof, therefore, assumes the form of a hood resting on the walls by means of a series of rafters which meet along the ridge and project beyond the walls as eaves. This solution to the problem makes it possible for the builder to enlarge his house when necessary at the expense of heavier wall construction to support the increased weight of the

roof. The simple inclined roof is by far the commonest form among these structures. Most of the highly developed houses found among the primitive peoples, belong to this rectangular category.

The primitive builders do not only build their houses conventionally on the ground, but they also build under-ground and above the ground. The under-ground houses are generally found in the most rigorous climates. The classic type is the Koryak house of North-East Asia and variations of it are found among the Eskimos and the prehistoric people of the Plains.39 These underground houses have been traced over a large part of Eurasia and North America. Building the house above the ground is done by primitive builders by raised platforms, piles or in the trees. It is fairly common in Asia, Oceania and tropical America. Tree-houses raised as high as 40 ft. to 60 ft. in the branches of the trees, provide an excellent protection from human enemies and wild beasts. The Garos of Assam and the Uralis of South India build tree-houses. The Garos build them for safety in the fields from wild elephants and the Uralis for keeping their women in seclusion at adolescence, menstruation and even at child-birth. Pile-houses, by raising the floor of the house above the ground, also offer protection from flood-water, humidity, vermins, insects and snakes. Pilehouses are very common in the swampy and humid regions of India.

12. ORIGIN, DEVELOPMENT AND DISTRIBUTION OF THE VARIOUS FORMS OF HOUSES

It is difficult, if not impossible, to trace the origin, development and distribution of the basic forms of houses. It appears that there could not be any such single region where a particular form of house originated and that the house could not go through a single evolutionary sequence. House-building, in fact, is such an universal phenomenon and the basic 'types' of houses are so widely distributed in the world in different climatal regions that all efforts to track down the place of origin and diffusion and to follow up the single line of evolutionary sequence, are expected to fail. Shapiro says: "In any event, it seems most likely that the house went through multiple lines of development, according to circumstances, rather than a

single evolutionary sequence. It is more accurate to conceive of its development as varying among diverse peoples, taking directions that materials, environment and skill suggested. In some instances, indeed, little or no progress whatever can be detected, with the result that at present almost every stage of complexity may be seen in the contemporary housing of mankind." Men live in caves today as they did thousands of years ago. Windbreaks and lean-to's provide shelters now as they did before. It seems as if the more the house changes, the more it remains the same old thing. "This very multiplicity of house types", says Shapiro, "found throughout the world leaves no doubt that the human habitation has had a complex history of development and adaptation"."

Herskovits, in his Man and his Works—the Science of Cultural Anthropology, says: "It is customary to think and write of most nonliterate folk as though their cultures were characterised each by a single housetype. This again simplifies what is, if not a complex matter, at least one which offers alternatives". He thus gives a summary survey of the distribution of different house-types in the world: "... the simplest shelters are the cave, the windbreak, the hut. More complex types are to be differentiated as to materials, design and permanence. They vary between the simple skin tent of the American Indian or the wooden lean-to erected in many parts of the world and the truly architectural structures of Peru and Mexico, West Africa and Indonesia. In North America are found the wigwam and tipi, tents covered with birch-bark and skins respectively, the multi-family dwellings of the South-Western Pueblos, the dug-out or halfunderground sod-covered dwelling used by the Mandan of the Upper Missouri and other tribes, the plankhouse of the North-West coast, the Iroquois long house. In South and Central America, structures humbler than the monumental achievments of the Peruvian and Mexican builders are the lean-to and the beehive hut of the South; the thatched dwelling of the Guiana; the communal structures of the Amazonian tribes, made with timbered framework and covering space upto 10,000 sq. ft.; and the simple rectangular dwelling of the mountainous areas. The thatched rectangular or round-house characterises Polynesia, but in Melanesia a great variety of types exists, from the lean-to to the great gable-roofed men's house, with the front peak of its roof sometimes rising to a height of more than a hundred feet. Africa runs the gamut from the simple beehive type shelter of the Hottentots, consisting of poles bent over to intersect at the top as a framework for a covering of skins, through the thatched round houses of East Africa and the rectangular ones of the Western part of the continent, to the architectural structures of such Sudanese cities as Kans and Timbuctoo, where the arch and the dome were known and liberally incorporated in buildings made of sun-dried, plastered brick".⁴²

It is evident from this survey, though incomplete, that it is almost impossible to find out the origin of a particular form of house and to trace its diffusion and evolutionary sequence. But if building materials influence the design of the house, as they do to some extent, and if the forms that can be easily fashioned with one material, cannot be so easily done with another, the utmost that can be said in favour of the adaptation of a particular form of house is this that, in different climatal and botanical regions of the world, the regional type of vegetation and climate has influenced the shape and form of the house and has subsequently led to its specialisation by a community of skilled house-builders.

13. NATURAL CAVES AND ARTIFICIAL HOUSES

It is well-known that India also passed through the rigours of glacial and pluvial periods as other countries did and these drove the people in India, as elsewhere, into the caves. We have plenty of palaeolithic finds in India, and also we have today complete stratigraphic evidence of the Age and Culture-sequences of the Stone-Age Man in India. It is fairly certain now that the Palaeolithic man must have entered India through the North-West and spread gradually throughout Central and Western India and from there to Southern India. Palaeolithic caves, therefore, must have been abundant in India, of which the famous Billa Surgam caves of Karnul represent a type. The Veddas of Ceylon are also cave-dwellers, but they are probably early Neolithic people. As we have already stated, caves only do not represent the most primitive human habitation. Beyond the mountains and hills, the peoples who lived and hunted in wild forests, had to build artificial houses. These earliest artificial houses are the windbreaks and lean-to's and they still persist widely in India.

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14. THE WINDBREAKS AND LEAN-TO'S: EKCHHĀPRĀ AND EKCHĀLĀ GHAR

The windbreaks and lean-to's still represent one of the most important forms of houses in India. They are known as Ekpaliyā or Ekchhāprā in Bihar⁴⁵ and as Ekchālā Ghar in Bengal. This windbreak and lean-to is the typical house of the Andamanese, living in the forests of the Andaman Islands in the Bay of Bengal. The Andamanese hut consists of sloping roof made of palm-leaves, erected on four posts, two taller ones at the front and two shorter ones at the back. Their permanent, semi-permanent and temporary huts are nothing but simple windbreaks and their hunting camps are simple lean-to's of leaves. As the Andamanese represent one of the most primitive peoples living almost in complete isolation from time immemorial, free from all culture-contacts, we can pertinently assume that their form of house is one of the earliest forms surviving intact through ages. We know that the earliest human inhabitants of India were the Negritos. who have survived in an almost unmixed form in the Andaman Islands and in mixed form in some specially isolated regions in India. Judging from its traces among some of the forest tribes of Southern India like the Kadars, among the Bagdis of the Raimahal Hills in Bihar and some of the Naga tribes, particularly among the Konyaks in Assam, it has been suggested by Dr. Guha that though now submerged, it had at one time a much wider distribution in India. It seems likely, therefore, that the crudest type of windbreak and lean-to is the earliest type of widely distributed dwelling house in India, probably introduced by the Negritos, India's earliest inhabitants and enlarged and extended by the later Proto-Australoids into a variety of secondary types.

15. THE "CIRCULAR FORM" OF HOUSE

The rectangular form appears to be the more preferred form of dwelling house in India and the circular form, though not dominant, is significant. In West Bengal, though the dwelling houses are not exactly "circular", the convex-curve of the heavily thatched roofs tends to assume a "round" shape. But the Bengali golās or granaries are predominantly "circular" in form, though ordinary "rectangular" granaries are found in some parts of North and East Bengal. In some villages in the Contai Subdivision of

Midnapore District (W. Bengal) "ghāni-ghars' or oil-pressing houses" are found which are 'circular' in form. Across West Bengal the harisabhā (Sacred centres of devotional singers) in Manbhum and some Muria ghotuls or dormitories in Bastar State are "circular" in form. 48 In Andhradeśa, along the eastern coast from Vizagapattam to Nellore, "circular" type of dwelling house is dominant. The Chenchus of Hyderabad build circular form of dwelling houses. This "circular" form, it is interesting to note, gradually thins out westwards, where it becomes mixed up with the Madhyabhārat and Marathi type of rectangular houses. In the Dravidadesa the "circular" form of dwelling house vanishes and a specialised rectangular form of house with deeply laid tiled roof is found. In the Malabar region, the dwelling houses of the Todas are half-a-barrel shaped and the vast majority of Toda dairies are now of this shape.49 But the other form of Toda dairy is "circular" with a "conical roof". There are only three or four of these dairies in existence and others have only fallen into disuse in recent times. The best known of these dairies is that at Nódrs. It has received the name of "Toda Cathedral". It is perhaps the finest architectural specimen of the circular and conical house-type in India, among India's one of the most primitive tribes. Originally poh and pali were the names of the two forms of Toda dairy, the conical kind being called poh and the ordinary kind pali. At the present time every existing conical dairy is a poh and every dairy which is said to have been in the past of the conical form is called poh. "It seems probable". says Dr. Rivers, "that in many cases a dairy, originally of the conical form, has been rebuilt in the same form as the dwelling hut, owing to the difficulty and extra labour of reconstruction in the older shape; and that in some of these cases the dairy of the new form has retained the name of the old and is still called poh".50 It seems likely, therefore, that the circular house-type has gradually fallen into disuse over a wider region in India, owing possibly to the lack of extra time, labour and skill involved in its construction and other material and non-material causes. The most plausible cause of disappearance of circular form of dwelling houses in India seems, however, to be the disappearance of "skilled builders" in some regions.

Now when shall we look for the introduction of this circular form of house in India? Neither the Andhra people, nor the Todas of the Nilgiris, represent racially the earliest settlers of India. All of them may be broadly included within varieties of "Mediterranean types". It is not possible also

to indicate the antiquity of the original "circular form" from the Bengali golas, Manbhum harisabhās, Muria ghotuls, and Bhuiya dormitories. We know that before the incursion of the Mediterranean types into India, there were Negritoid and Proto-Australoid drifts into India. We know that in the Andaman Islands this Negrito race has survived almost in an unmixed form without any possible culture-contact. Once these Andamanese, as it has been lately discovered by Prof. Radcliffe Brown, erected communal huts of circular type in their permanent headquarters. Prof. Brown says: "The hut was roughly circular in form and might be as big as 60 ft. in diametre and 20 or 30 ft. high at the centre. The shape was somewhat that of a beehive. Two concentric circles, one of tall posts near the circumference, were connected by horizontal and sloping roof-timbers, and on these were laid and fastened a number of mats of palm-leaves. These mats reached as a rule, as far as the ground, a small doorway being left on one side".

"Such communal huts, while still used in the Little Andaman and by the Jarwa, and formerly used by the forest-dwellers of the Great Andaman, were apparently not often erected by the coast-dwellers of the larger island ... Mr. Man seems to have regarded them as being peculiarly characteristic of the Jarawa and the natives of the Little Andaman. There is evidence, however, that even the coast-dwellers formerly erected such huts, for in the Akar-Bale tribe there are several places with names such as Parun Bud and Golugma Bud, which show that communal huts existed there at some time. The word bud is used to denote a communal hut, as compared with a village which is called baraij".⁵¹

This finding of Prof. Radcliffe Brown indicates that the circular form of dwelling house once existed and even was highly specialised by the Negritos in the Andaman Islands and subsequently it fell into disuse owing to the labour, time and skill involved in its construction, the same reasons perhaps for which the Toda conical dairies and the Bengali circular granaries are fast dying out. Moreover, the crudest possible subsistence economy of the Andamanese might have hindered the growth of a group, class or guild of "skilled builders" who must be maintained from the 'surplus' product. Rivers has spoken of 'special architects' among the Todas⁵² and Seligmann have mentioned that "there is evidence that a hundred years ago there were organised communities of house-building Veddas." But these skilled builders are dying out, rather already dead, among the Todas and the

Veddas, mainly under the heavy pressure of backward economic conditions. Toda conical dairies have, therefore, fast disappeared. Similar economic conditions are leading to the gradual elimination of the specialised gharāmis or house-builders of Bengal and the round-shaped golās of Bengal are therefore fast vanishing. But the most significant exception is the circular gade illu (permanent house) of the Chenchus of Hyderabad. The predominant form of dwelling house among the Chenchus is still the circular form, but there is no communal house or dormitory in any Chenchu village.⁵⁴ The Chenchu houses are individual family houses, and a Chenchu, with the help of his near relations and friends, builds his own house. Men and women both participate in construction, like the Andamanese. But while the communal circular huts of the Andamanese might be as big as 60 ft. in diametre and 20 or 30 ft. high at the centre, the family circular huts of the Chenchus are generally between 8 and 15 ft. in diametre and 6 and 10 ft. high at the centre. The reduction of the size is due to the reduction of the living unit, from 'community' to 'family'. We have already seen that the socio-economic unit of the Chenchus is the 'family' and the size of the dwelling house is adapted to this basic unit. It appears that inspite of the most primitive subsistence economy of the Chenchus and the consequent lack of growth of any group or guild of "skilled builders", the Chenchus have been able to maintain this oldest traditional circular form of dwellinghouse, mainly due to the smallness of the family-unit houses and individual specialisation. There is evidence also that in the plains villages where the Chenchus have come in contact with the Telugus, they are gradually abandoning the traditional circular form of dwelling and adopting the rectangular mud houses of the Telugus.55 Culture-contact, therefore, might have been one of the causes of disappearance of the circular form of dwelling house in India in earliest time.

We have already noted that the circular form of dwelling house is the predominant form among the Negritos in East Africa. It was once the dominant form of house among the Andamanese, and is still today the prevalent form among the Nicobarese and the Chenchus of Hyderabad. In the most primitive type among the Chenchus there survive some of the somatic characteristics of the most ancient stratum in Indian racial history, which Eickstedt terms 'Malid'. In Dr. Guha's opinion there is a submerged Negrito strain in the Chenchus. This concurs, to a certain extent, despite

terminological divergence, with Eickstedts' assumption of a Proto-Negritid element in his Malid sub-race.56 There can be, therefore, little doubt that the Chenchus are not only racially but also culturally survivals of most ancient India.⁵⁷ And in view of these evidences, it does not seem very much unlikely that the circular or round form of house was adopted by the Negritos in India, probably both as communal and family dwelling houses, and was adapted, modified and elaborated by later Proto-Australoids and Mediterraneans. As the Negritoid hunters and gatherers seem to have spread out to different regions of India, the distribution of the "circular form" of house also seems to have been once wider in India. The causes of disappearance of this round form of house as a dwelling house might be economic, social and cultural. Socio-economic causes might have led to the extinction of the 'skilled builders' and "communal living" and to the consequent disappearance of the round form of dwelling house. Social organisation based on individual family unit has conspicuously helped in the preservation of this oldest traditional form among the Chenchus in Hyderabad, but culture-contact of the plains Chenchus with the Telugus is leading to its gradual disappearance.

The other plausible cause might be that there was some "single centre" of origin, inside or outside India, where this circular form of house "originated", where it was "elaborated" and wherefrom its "diffusion" took place to other regions. But the data available at present strictly forbids any such adventurous location of the "centre of origin" and then following up the track of "diffusion" from that centre.

IV

16. THE ECONOMIC BASIS OF A VILLAGE

A 'village' may be defined as a small permanent collection of people with their homes and other material and cultural tools. The Toda name for a village 'mad' or 'mand', according to Dr. Rivers, "denotes rather a place—a place connected in any way with the active life of the people of the origin of the village may therefore be traced to the active life of a group of people which needs and makes possible permanent collective dwelling in a more or less fixed space. This sort of permanent collective dwelling is not always possible in the nomadic hunting stage. The nomadic bands generally tend to converge on the seasonal food-centres, and the

dwelling-centres change with the food-centres in different seasons. But some sort of permanent pattern or arrangement of spatial organisation has frequently been noticed in these nomadic hunting bands. Each family or household has a regular place in the camp lay-out and sets up its dwelling in that position, regardless of where the band may be. Thus the Andaman Islanders live in small bands averaging about 30 individuals which move about through a fixed territory on a sort of circuit. The dwellings are simple open-fronted sheds arranged on an elliptical plan. In addition to the huts occupied by family groups, a bachelor's hut is provided for unmarried vouths, always located to the right of the main entrance of the camp. Each family normally occupies a hut so many places away from that of the headman, whose dwelling is also a fixed point. All huts face inwards towards an open space—the dancing ground. At one side of the 'dancing ground' is found the 'cooking place', generally close to bachelor's huts', because they attend to cooking. Besides a public cooking place each family has its own fireplace in the hut, on which a fire is kept continually alight This is the Andamanese village-plan, determined by its socio-economic organisation.

This semi-permanent pattern of spatial organisation in the nomadic hunting stage evolves into the permanent spatial arrangement of a village under conditions of Neolithic economy. The essential pre-requisite of a settled village-life is the ability to produce sufficient food to relieve the group of the stark necessity of nomadism. Without a regular and abundant food-supply from whatever source there could not be any settled life and one 'type' of group-life which grows up in stable economic conditions is the 'village'. We can therefore infer that the Negritos, the earliest inhabitants of India, might have evolved some sort of a semi-permanent pattern of spatial organisation like the Andamanese village, which was later developed into more permanent village by the Niśādic or Proto-Australoid hunters and shifting cultivators and was shaped ultimately into the stable pattern of the typical Indian village by the Dravidian-speaking Dāsa-dasyus or Mediterraneans, practising Neolithic and Chalcolithic economy.

17. THE "OLDEST" VILLAGE KNOWN IN INDIA

The Neolithic 'settlements' have been adequately explored in the East Mediterranean Zone and they clearly indicate the changeover from the

food-gathering to the food-producing economy, through the transitional stage of 'mixed economy'. The accumulated debris of these primitive settlements forms a regular 'tell' and the entire East Mediterranean Zone is studded with thousands of such tells, working back from the highest level of which to the depth of the underlying deposits we can get a glimpse of the age of the oldest village on the site and a rough outline of its 'pattern'. In the earliest level of the Tell Hassuna mound in Mesopotamia, camping sites of a semi-nomadic people have been unearthed, on the top of which permanent habitations with little houses set round a courtyard and number of grain-storage bins have been found. Houses are all built with mud. Such a sequence has been found to exist at Tepe Sialk mound in North Persia, in Palestine and in other Mediterranean regions. In the present stage of our archaeological knowledge we cannot work out any such clear-cut sequence in Western India, where we must look for the introduction of agriculture in India. But there are indications of this sequence in the Baluchistan cultures which cannot be ignored. The Arab "tell" is the Sindhi daro, the N. W. Frontier's dheri and the Baluch dhamb. We are in a much better position to work out roughly this sequence in North Baluchistan where, at a typesite in the valley of the Zhob river we have, layer by layer, an invaluable stratified succession of human habitations in a large dhamb called Rana Ghundai (R.G.). It is by the careful digging up of this dhamb and the collection and classification of its contents layer by layer that the cultural sequence has been ascertained, the layers forming as it were the leaves of a book of unwritten history. R.G.I., at present represented only at the type-site, awaiting further discovery at the bottoms of yet unexcavated dhambs, consists of no structural remains but recurrent occupation of the site by semi-nomadic people with impermanent huts or tents. In R.G. II we see the new-comers building houses with boulder footings over the compacted debris of R.G. I. Nothing is known of the lay-out of the settlements in R.G. III except at Nal, where houses with rooms or courts varying from 11 feet by 13 feet to tiny thickwalled chambers only 5' square or less have been found. At Moghul Ghundai a possible defence wall to the settlements have been traced. The average size of the settlements at Amri in Sind seems to have been something under two acres. At the site of Nundara, discovered by Stein in South Baluchistan, groups of rooms fall into blocks about 40' square, within which there

may be eight or ten subdivisions of size varying from large rooms or courtyards, each associated with a half-a-dozen smaller ones. Culturally, though not chronologically, the R.G. I and Amri settlements have interesting parallels in Tell Hassuna and Tepe Gawra in Mesopotamia. These Sind and Baluchistan settlements indicate also the changeover from the foodgathering to the food-producing economy in India, through a possible transitional stage of 'mixed economy'. They may be, roughly speaking, 5000 to 7000 years old. They may not represent the oldest 'settlement' in India which may still lie hidden under unexcavated mounds, but they do represent the oldest village-pattern known to archeological record in India.

The outline of social organisation which emerges out of these villagepatterns may be something like this: Groups of families constitute a village, subsisting on cattle-keeping, shifting cultivation and some crafts. Each room is occupied by a family and each block of rooms by a group of families. Rooms, big or small, may also be used as corn-storage houses or granaries and some may serve the purpose of 'pens' for domesticated Courtvards are used in common. Villages are walled. Houses are built with locally available 'stone' and one of the reasons for building groups of houses or rooms in blocks might be 'stone' and inefficient 'tools'. Such spatial aggregates or 'villages' formed social organisms whose members all cooperated for collective tasks. The size of the peasant communities in Western India was probably largely determined by the factor of self-sufficiency. At different sites in Sind and Baluchistan it has been found that houses are connected by roadways 6' to 8' and alleys 3' to 2' 6". Such public ways must have been communal, not individual works. orderliness evident in the arrangement of the dwelling houses along definite streets at different sites in Sind and Baluchistan, has also been found to exist in the settlements of Egypt, Europe and South Russia. Such orderliness of spatial arrangement seems to be the expression of a definite form of socio-economic organisation, based mainly upon mutual cooperation.62

18. THE PRE-ARYAN VILLAGE-PATTERN

We have already discussed the 'types' of 'settlement-patterns' in India in relation to their environment and economy. Here we shall dis-

cuss the evolution of this "pattern" historically, through "villages" and "cities". The peasants' settlements in Western India mentioned above. probably reflect the village-pattern of the different 'types' of Mediterraneans. The picture of the earlier village-patterns of the Negritos and Proto-Australoids cannot be accurately drawn as almost all the surviving patterns have been adversely affected by the economic and cultural traits of different peoples who followed them. The village-pattern of the earliest Negritos in India may roughly be drawn from the Andamanese 'model', already described. In India proper, the 'settlements' of the Birhors of Chotanagpur, the Veddas of Cevlon and the Chenchus of Hyderabad, may still serve as examples of earlier types of Proto-Australoid villages. Settlements of both the Jaghi and Uthlu Birhors consist of about half-a-dozen or more huts. These settlements are called "tandās" or "food-groups". By the side of the most Jaghi settlements is a sacred grove called Javar and in both Jaghi and Uthlu tandās, at the end of the settlement, is a giti-ora or sleeping hut for bachelors. This may roughly indicate the earlier village-pattern of the Proto-Australoids. The gradual evolution of the Proto-Australoid village in India from this semi-permanent to a permanent pattern, may still be traced in the villages of the Veddas. A short summary of the 'types' of the various Vedda settlements is given below to indicate roughly the stages of this evolution. The summary is based on the direct observations of Seligmann about 40 years ago: 64

Kovil Vanami Veddas: There are about 50 families. They lead a wandering life of hunters and collectors for half the year, when they live in rock-shelters. For the rest of the year they pay attention to chena cultivation. Two or three families may make chenas together, though five or six families would often join to make a single chena. They build huts, form a temporary 'settlement' and live together.

Dambani Veddas: Some 20 families living in tolerably built houses keep buffaloes and cultivate chena. The chena is big enough to supply their own needs and also to permit some amount of exchange trade.

Elakotaliya and Kalukalaebo Veddas: There are about 12 mud huts, all well built. Game is scarce, chenas are flourishing.

Yakure Veddas: They live in about 40 mud houses, compactly built. The settlement looks like a 'town'. Game is scarce, but the chenas are very flourishing.

Here the outline picture of the permanent village-pattern of the Proto-Australoids may be seen roughly emerging from the shifting stage. The basic feature of the pattern, both in the food-gathering and food-producing stages, is 'self-sufficiency'. The different 'types' of Mediterraneans, it seems likely, later adopted and enriched this basic 'village-pattern' of India and gave it a more lasting shape on the basis of their more advanced 'economy' and 'technique'.

19. THE VILLAGE IN THE VEDIC AGE

By the time of the composition of even the earliest hymns of Rgveda, the Arvans settled down to agriculture and village life in India. In Rgveda, one passage (X. 23) refers to the clearing of forests. It might be that the Arvans selected the site for settlement in forest lands, cleared the forests, divided the homestead and ploughlands among themselves, probably in consultation with their headmen and founded a village or grama. Such terms as Kshetrā-sā, Kshetra-jesha, Kshetram-jaya and Kshetrasyapati, meaning "gaining land", "acquisition of land", "conquering cultivated land" and "lord of the field", indicate that the Vedic Arvas not only destroyed, conquered and occupied the towns and cities of the Pre-Arvan Dasadasvus, but also destroyed many villages, ousted the peaceful Dasa-dasyu, Niśāda-Sabara villagers, occupied by force their homestead and ploughlands and rebuilt their own villages upon their ruins. In this process of occupation of lands and villages by conquest, it seems very likely that the Aryans would try to adapt for themselves the Pre-Arvan village-pattern and remould it slowly in their own socio-ideological pattern. The pastoral Aryan patriarchs and victors imposed upon the vanquished Pre-Aryan villages the rigid patriarchal system of ownership and inheritance of private property and also a hierarchy of rank and status. Professors Macdonell and Keith remark that the Vedic villages were apart from or close to one another and were connected by roads. They contained granaries. sumably they consisted of detatched houses with enclosures. The village was firmly founded upon individual tenure of land, which meant tenure by a family. The village itself was the aggregate of families.

social unit was the patriarchal family comprising several members living under father or eldest brother, called the *kulapa*. An outline picture of the Vedic village may therefore be drawn in this way: 47

Several Kulas or Gṛhas (families) constitute a Grāma, each Kula residing in detatched Gṛhas (houses) with enclosures. The house of the Grāmaṇī or the village headman is probably situated in the centre of the village. The entire village may or may not be fenced. Round this Amā or homestead land is the belt of Kṛṣi or ploughland, owned by separate Kulas and rigidly marked. Beyond the Kṛṣi land is the Gavya, Gavyūti or pasture-land, used collectively. Beyond the Gavyūti is the Araṇya, a kind of no-man's-land, home of the hermits and outcasts. Beyond the Araṇya is the Dīrghāraṇya or dense forest-land.

20. ARYANISATION AND HINDUISATION OF THE INDIAN VILLAGE

The primitive communal foundations of the Pre-Aryan village was slowly and steadily being shattered to pieces in the process of its Aryanisation and Hinduisation. The village-pattern was undergoing a radical change and a new "collective" based on a new economy, was taking shape. Land-grants of kings, recorded in some of the Brāhmanas, were already creating India's first landlords. The Sujātas and Maghavanas, rich nobles of high birth and huge wealth, were already crystallizing into superior 'castes' and exploiting 'classes'. In the Jatakas we see the sorry spectacle of healthy peasants leaving their homes to toil as hired labourers in the estates of non-cultivating landlords, estates of 1000 karīsas (approx. acres) or more, cultivated by 500 ploughs with hirelings to ply them. We see the distinction of labour between ukkattha and hina or high and low, the growth of a class of hinasippas or despised arts, the dasa-kammakaras or various grades of slaves, serfs, unfree and dependent labour. A hierarchy was being imposed upon different occupational groups, reinforced strongly with primitive 'taboos' and 'beliefs', resulting in the formation of 'castes' and 'classes', with the Brahmins and the Kshatriyas at the apex and infinite gradations of unfree labour at the base of the social pyramid. In the villagepatterns of the Vedic, Buddhist and Hindu India, this social stratification has been progressively reflected. The potters, carpentars, tanners, weavers,

metal-workers, other craftsmen and occupational groups were already being segregated into separate villages in Vedic Age. Even this tendency of occupational segregation might be operating in Pre-Vedic times. But in Pre-Buddhist, Buddhist and Hindu India this tendency became dominant and segregation and stratification of villages drifted towards perfection. In the Jātakas we find different orders of villages—Gāmaka (small village), gāma (village), Nigama-gāma (Market-village), Paccaṇtagāma (Border village), Dvāra-gāma (Suburban village), and also different groups of villages like Kevaṭṭa-gāma (Fishermen's village), Kammāra-gāma (Smiths' village), Nesāda-gāma (Hunters' village), Vaddhaki-gāma (carpenters' village), Nalakāra-gāma (basket-makers' village) and villages of Brāhmans, Caṇdālas and other castes and classes.

This variety of village-patterns was mainly the result of the division of labour between agriculture and industry on a considerable scale, made possible for the first time in India by some sort of organisation of various grades of 'unfree' and 'dependent' labour and by pressing this tremendous labour force, so long unorganised and wasted under conditions of "primitive economy", into the socio-economic services of the country.* The "tribal collectives" were being replaced by "village communes" based on occupational division of labour. That was perhaps the most revolutionary contribution of the Aryans to the economic and social history of India. But this traditional "collective" and also the "static technology" checked the dynamic growth of Indian villages and towns, sapped their vitality, and decadence set in. The 'collectives' cried halt to the expansion of 'trade' and the stagnant technology diverted the "accumulated capital' towards the eternal "land". India began to produce, therefore, "Lords of Land" of various grades, instead of "Lords of Capital". Villages were subjected more and more to the economic and political exploitation of the towns and

^{*}This is the historic role of slavery in antiquity. The celebrated statement of Max Beer that "the moral and political collapse of the old world was due chiefly to slavery—to unfree labour, to the despising of productive activity, and the resulting stagnation of the technology of labour" (Social Struggles in Antiquity, p. 109)—can certainly be applied with equal force to ancient India. But slavery in ancient India took diverse forms under different historical conditions, from patriarchal and domestic slavery to slavery in commodity production and that also within the fold of castes, communes and collectives. The form of slavery, therefore, in ancient India must be studied separately and all efforts to fit together the phrases of "historical materialism" into a neat system in India should be cautiously avoided.

relegated to the background. In Kautilya's Arthaśāstra (321-300 B.C.) we see that the king may construct villages either on new sites or on old ruins by inducing the foreigners to immigrate or by diverting the surplus population of crowded centres (Svaděśābhishvandavamanēna vā). A village should consist of not less than a hundred families and of not more than 500 families of agricultural people of Sūdra caste, extending as far as a Krōśa or two. There should also be organised 'unions' of villages. A sthānīya is to be set up in the centre of 800 villages, a dronamukha in the centre of 400 villages, a khārvātika in the centre of 200 villages, and a sangrahana in the midst of 10 villages. These were trade-centres where villagers could meet. It should be noted that villages stratified and segregated on caste-and-class basis must be organised into such 'unions' to be self-sufficient 'collectives'. Vāgurikas (trap-keepers), Sabaras (archers). Pulindas (hunters), Candālas and other Aranyacharas (wild tribes) would guard these villages. "No company other than the one of local birth (Sajātādanyassanghah), and no guilds of any kind other than local cooperative guilds (Samutthāyikādanyassamayānubandhah) shall find entrance into the villages of the kingdom. Nor shall there be in villages buildings (Salah) intended for sports and plays. Nor, in view of procuring money, free labour, commodities, grains and liquids in plenty, shall actors, dancers, singers, drummers, buffoons (Vāgjīvana) and bards (Kuśilava) make any disturbance to the work of the villagers; for helpless villagers are always dependent and bent upon their fields". From the concluding line—"for helpless villagers are always dependent and bent upon their fields"—it seems that these injunctions were issued for imposition upon peasants' villages, that is, the villages of the Sūdras. Villages had Brahmasomāraņyas or sylvan retreats for religious practices, Tapovanas for hermits, Sētushus or reservoirs and lakes, Punyasthānas or places of pilgrimage, pushpa-phala-vāta or orchards, but they were not meant either for the bulk of Śūdra peasants or millions of grāmabhrtakas (village labourers), dāsas and ahitakas (hirelings). The peasants or the Sudras had simply their kedāras or paddy-fields for cultivation and recreation.

This shadow of decadence deepened in the villages in the Hindu Period. The traditional "collective" could not resist the inevitable decadence of Indian villages for long. Whether in the Purāṇas or in the Silpaśāstras, the Grāma-lakshana is a secondary theme, the dominant theme being Rāja-

prāsāda and Devālaya, with their adjuncts and accessories. Manushyālaya or the human dwelling house recedes conspicuously into the background. In Nagara-vinyāsa (Town-planning) and Grāma-vinyāsa, more attention is paid to the location and construction of palaces and temples than to the social planning of human houses or to the amenities of the human dwellers. The division of villages in the Mānasāra into eight classes called daṇḍaka, sarvatobhadra, nandyāvartā, padmaka, swastikā, prastara, kārmuka and chaturmukha—is concerned more with abstract 'designs' than with concrete social and economic 'planning'."

21. NAGARA-VINYĀSA: TOWN-PLANNING FROM THE PRE-VEDIC TO THE HINDU AGE

In the history of human civilisation the Nagara or the city rises in the background of a new economic organisation provided by metallurgy, wheeled transport, sailing ship, specialist craftsmen and traders." It rises out of the need of all for combination and cooperation, communication and communion. The city is therefore both a new economic organisation and a socio-cultural emergent." The birth-mark of the city is its purposive social complexity. The city represents a new magnitude in human settlement. Soon after 3000 B.C. the walls of Erech in Mesopotamia enclosed an area of 2 sq. miles, Ur covered 220 acres in about 2500 B.C., Assur 118 acres before 2000 B.C. and Mohenjodaro and Harappā in India about a square mile in about 2500 B.C. Urban houses were more commodious than any Neolithic house and they covered larger areas and were divided into a greater number of rooms." This progress of housing and street-laying in India, from the Neolithic villages to the Chalcolithic cities, is indicated in the following table:"

NEOLITHIC SETTLEMENTS Western India

Sizes of Settlements

Area of Houses

Width of Streets

Average 2 acres in North and South Baluchistan and Sind. Large Rooms: 15ft. by 15 ft. 6 ft. to 8 ft. (Nundara)

Small Rooms: 8 ft. by 5 ft. 3 ft. to 2 ft. 6 in.

or less (Nundara) (Lohri and Kohtras Buthi)

Cities of the Indus Civilisation

Area of the City

Area of Houses

Width of Streets

Mohenjodaro: 1 sq. mile Harappa: Little less than a sq. mile.

Large: 54 ft. by 60 ft. Small: 27 ft. by 80 ft.

First street (M)—88 ft. Smaller streets (M)—9 ft. to 12 ft. Lanes and Alleys—4 ft. upwards.

Sizes of Neolithic Mud Bricks in W. India

Nal : 12" by 12" by 7½ inches R. Ghundai: 13" by 6-8" by 2½ inches P. Ghundai: 14" by 9" by 2 inches Nal : 23" by 9" by 8½ inches Dabar kot : 24" by 16" by 4 inches

At Mohenjodaro

Burnt Bricks

From $10.25'' \times 5'' \times 2.25''$ to $20.5'' \times 8.5'' \times 2.25''$

Unburnt Bricks

From $18.9'' \times 7.35'' \times 8.5''$ to $15'' \times 7.15'' \times 8.1''$

The spatial expansion resulted in the multiplication and separation of rooms for cooking, sleeping, storage and other purposes. All the 'prosperous' houses in the Indus cities had specially constructed bathrooms in the third millenium which in contemporary and later Mesopotamian cities were not so universally found. Individual latrines and public bathrooms have also been found in the Indus cities. A magnificent system of covered sewers and vaulted subterranean conduits drained Harappa and Mohenjodaro in the Indus Valley before 2000 B.C. which the medieval cities of India, even New Delhi about 4000 years later, entirely lacked. It may be that the lords of Mohenjodaro and Harappa administered their cities, as stated by Wheeler, "in a fashion not remote from that of the priest-kings or governors of Sumer and Akkad" and that the socio-economic structure of the Indus cities "conformed in principle with that of the other great riverine civilisations of the day." But the lords of the Indus cities tried to observe some of the basic principles of city-planning which their contemporaries in Near East could not. The concentration of various trades and industries into

specific quarters or streets, the storage of grains in granaries and the municipal flour-mills, suggest some sort of industrial organization and employment of labour (not necessarily "slave labour" as suggested by Wheeler) in the cities of Sind and Punjab. The so-called "workmen's quarters" marshalled, in the words of Wheeler, "like a military cantonment", does not be be at the "copper tools" of the builders of the Indus cities.

This nagara-vinyāsa of the Mediterraneans was adopted by the later Arvans who were not city-builders. The first impact of the new economic order, that is, the division of labour between agriculture and industry on a considerable scale, made possible by the utilisation and organisation of abundant surplus labour—led to the growth of a large variety of "towns" in ancient India. The Pattanas (Port-towns), the Nigamas (Market-towns), the Vihāras (University towns), the Durgas (Fort-towns), the Rājadhānīs (Capital cities) grew up and along with them a host of khuddakanagarakas, sākhānagarakas, and ujiamgalanagarakas or suburbun towns. But the cities, like the villages, began to decline with the complete stagnation of the new economic order on which they were based. As "trade", with the persistent drag of the self-sufficient "collectives" behind, could not expand beyond a certain limit, the cities also could not flourish for long. The trading towns of ancient India began to lose their importance, and court-towns and religious towns began to grow up. The city-planners were occupied with the designs of the palaces of kings, their columns, towers and pinnacles, their top-storeys (uparimatalas), bed-chambers (sirigabbhas), gambling halls (jūtamandalam) and harems (antapuras and oradhas) where sixteen thousand dancing girls (solasahassanātakitthiyo) could be accomodated. The Asoka garden, Kannikā garden, Pātali garden, Uyyāna-nagara or garden-house, Ārāmas or pleasure parks were all well-planned that the king might indulge in various pleasures. The lords of Harappa and Mohenjodaro could not dream of executing a 'city-plan' like this with all their "bureaucratic authority" which the lords of later Buddhist and Hindu cities carried out without any compunction.

With the rise of the Brāhmanical Hinduism, the cities assumed more imposing forms but began to drift away from the basic principles of social and human planning. The Purānas, Mānasāra and other Silpaśāstras concentrated more and more on the mechanical set-up of different occupa-

tional groups, castes and classes in the city, with Gods, Kings and Brahmins dominating the entire scene. The Agnipurāṇa, for example, presents the following city-plan"

North: Brahmins, Pious men, Judges and Agricultural traders.

South: Vaisyas, Dancers and Musicians, Prostitutes.

East: Kshatriyas, Military officers, Spies.

West: Ministers, Treasurers, Armament traders, Vaidyas and Sūdras.

This is an outline of the plan. There are details of the set-up in the northsouth-east and south-west corners of the city. east, north-west, Devālavas or temples of Vishnu. Indra and other benevolent gods must be erected on all corners of the city for its protection against the piśāchas. devils and demons. In the Manasara, towns are divided into eight classes -rājadhānī, nagara, pura, nagarī, kheta, kharvata, kubjaka and pattanaand all must have walls, ditches, gates, parks and temples. But the Rajagrha-Vidhāna and Rājānga-Lakshana, Devālaya Pratimā-Lakshana, constitute the main theme of Manasara and other Ekabhumis (one-storeyed buildings) and dvitalas (two-storeyed buildings) there are, probably these are middle-class houses, but Chandrakanta, Meghakānta, Sambhukānta, Vajrakānta, Kalingakānta, Magadhakānta and other types of ten-storeyed, eleven-storeyed and twelve-storeyed buildings, serve as examples of architectural 'abstractions', of constructional engineering lifted, in the midst of endless leisure, to the cloudland of pure fiction.

To the authors of the Silpaśāstras, the city was no longer a full-fledged collective settlement, consciously planned to satisfy man's social needs and "multiply both their modes and methods of expression". The traditional "collective" was, of course, still there in the city-planning but it was the semblance of "collective" and not its real life and content, which were fast declining. The city was no longer functioning fully "as the specialised organ of social transmission." The architects of ancient India had already oriented the city toward fixity, toward the priestly cult of

permanence and eternity as opposed to the collective faith and dynamics of life.

V

The problem of housing the gods was probably first solved when it arose by accommodating the gods in a corner of man's own house. Gods were then grhadevatās and kuladevatās or household gods. Then appeared the grāmadevatās or village-gods with separate houses or 'shrines', and in course of time the nagaradevatās or city-gods with gigantic temples arose with the palaces of the kings.

22. GRHADEVATĀS AND GRĀMADEVATĀS OF INDIA

Devatās are countless in India and some sort of enumeration would be necessary to give an exhaustive account of all of them. A brief account of some 'gods' of the primitive would serve our purpose. The Andamanese have two principal gods, Bilika (Puluga) and Teria (Daria) and both are personifications of the two main winds blowing in the islands, the first of the north-east monsoon, the second of the south-west monsoon.⁸² By the side of most of the Jaghi Birhor hut in Chotanagour, is a sacred grove called jayar.*2 The Munda villages still retain a portion of original forest to serve as sarnās or sacred groves.*3 Both Hill Kharia and Dudh Kharia settlements have their sacred groves. 4 The Oraons have one or more Sal groves, now dwindling down into one or more solitary trees in some villages, where their gods reside.*5 The Santhals have their sacred groves near the end of their village streets.*5 Some of the Nagas erect trees and tall bamboos covered with leaves near the villages to celebrate their gennas.87 In the Garo villages there are always a number of long bamboos with leaves on, placed upright on the ground in front of and close to many houses, which are the abodes of their gods.** In the vicinity of the Khasi village, not more than a few hundred yards away, are to be seen dark woods of oak and other trees where their village deity resides.* In the villages of Bengal the majority of grāmadevatās still live a very simple life in sacred groves and under trees and cannot afford the luxury of dwelling in specially erected houses'. The Dravidian gramadevatās are also as simple as peasants and most of them are without any shelters."

The gods, it seems, were nomads in the beginning. How could 'nomadic' men afford to worship 'settled' gods? When men had to clear jungles for their dwellings, the trees cut down served them for house-timber, houses were built and probably some trees were left intact to serve the purpose of the sacred grove. In Munda and Santhal villages the survival of this procedure can still be traced. Although the greater portions of the primeval forest have disappeared under the axe, many a Munda village still retain a portion of original forest to serve as sarnās or sacred groves." When the Santhals build a new village, a number of men become possessed by the national bongas and in this state show where the sacred grove is to be located.⁹² It seems, therefore, that in the stage of hunting and shifting cultivation, when the 'settlements' of men shifted from one place to another, the 'sacred grove' also shifted with them. When as agriculturists men settled down in permanent villages, the question of settling the gods arose and gods were settled in permanent groves, trees and other places, but all of them were not necessarily 'housed'. Probably gods first shared the dwelling house with grhapatis as grhadevatās and then they were housed in separate village shrines as grāmadevatās. It must be remembered in this connection that in India, the archaeologists have not yet been able to dig out a single structure of 'village shrine' from the Neolithic settlements of Sind and Baluchistan and the 'temple', though long anticipated, is still eluding the grasp of the diggers in the cities of Mohenjodaro and Harappa. But clay-figurines of mother-goddesses have been found in abundance in these sites. The evolution of Devalava or the 'house of god' in India is, therefore, not easily traceable. This much we can say that the status of gods appears to be correlated with the status of men and their living conditions.

23. ŚMAŚĀNA AND MEGALITHIC CULTURE

Beyond the grāma we must also look into another important place, the $\pm ma \pm na$ or the burial and the cremation ground—India's holy place of hoary antiquity—for the evolution of gods and temples. In India the cult of 'stone' is also one of the most primitive cults and sacred stones and

gods of stone are numerous.* This cult of stone and the holiness of the śmaśāna combined to create Siva, perhaps the dearest and the most magnificent of all national gods of India's millions. And the fertility cult, associated with the 'phallic' symbol, moulded the stone into the image of Siva. In the śmasāns, out of the ashes of men a number of gods arose in India and, out of the ruined models of burial mounds, monoliths, stone-circles and dolmens, the shrines and temples of India were built.

If we visit the primitive śmaśānas we shall find a large number of monuments of stones built for funerary and cult purposes. These monuments are usually built of large natural blocks of stone, few may be slightly shaped, and are called 'megaliths'. They have been classified by the archaeologists into the following groups, according to their principal architectural features:"

Menhirs: Large single stone pillars of varying heights, vertically planted on earth.

Cromlechs: A number of menhirs arranged more or less in circles, also called 'stone-circles'. It may be elliptical or in rare cases rectangular.

Alignments: Rows of menhirs, arranged in open lines, well-nigh rectilineal.

Passage Graves: Dolmens approached through slabsided or roofed gangway.

Dolmens: Vertical slabs or blocks of stone supporting a roof slab, the whole being of room size and approximate shape. These may or may not be covered with mounded-up earth.

Trilithons: Two menhirs supporting a roof stone.

Stone cists: The cists or coffins in stones. May be degenerate dolmens or passages reduced to grave size.

^{*}Stones are the objects of religious reverence among many peoples of the world. Africa and India may be called the true "homes" of "stone idols". Dr. Karsten in his book "The Origins of Religion", suggests that the stone "on account of its hardness, is believed to possess supernatural powers". But 'hardness' alone does not make a thing 'supernatural' in the primitive world. The 'mana' of the stone is to be sought in the original 'function' of the stone, in the tremendous role the 'stone' tool has played in the struggle for existence of man for several thousand years since the dawn of civilisation. At a somewhat higher stage of culture, stone was carved into a certain human likeness.

Now let us make a short survey of some of the śmasans of the primitive tribes of India in different regions: 44

- Central India: The Gonds erect memorial stones, the stones varying according to the importance of the deceased, those for prominent men being 8' high.
- Chotanagpur Region: The śmaśān of the Mundas adjoins the village basti and consists of a number of big stone slabs lying flat on the ground or propped up on small chips of stone at the corners. These are called by the Mundas "The House of the Dead", Śmaśān-diri or burial mound. The Hos also have been found to build memorial stones or menhirs in their śmaśāns.
- Assam: In the Khasi and Jaintiā Hills the first object which strikes the eye is the large number of menhirs, cromlechs and dolmens. The Angami Nagas erect stone menhirs, but the graves of the Semas are mounds of earth in front of their houses, surrounded, in the case of men only, by a low fence with a little thatched roof above it. The Mikirs set up memorial stones in memory of important personages, such as gaonburas (village headmen). The Garos plant the kimas or memorial posts erected for the deceased members of their family under the eaves of their houses.
- South India: The Todas build a 'funeral hut' on the model of dairies within a stone-circle for the reception of the dead body. It is left standing after the funeral of men particularly and may be used on a second occasion. The Badagas worship cromlechs. An upright stone, enclosed within a stone-circle, is still the only temple of the Irulas. The Kurumba's temple consists of a stone-circle in the centre of which stands a block of stone. The Kurubas, allied to Kurumbas, worship the graves. The Malai Ariyans have burial mounds or tumuli, surrounded by long splintered pieces of granite set up on the edge.

24. DIFFUSION OF MEGALITHIC CULTURE IN INDIA

The survey indicates that "Megalithic" culture is widely distributed all over India, associated with both the Austric-speaking and Dravidianspeaking peoples and also with the Indo-Mongoloids. Speculations, therefore, have been rampant so long among scholars about the introduction and diffusion of Megalithic culture in India." We are now fairly certain that it was introduced in India by the Mediterraneans. But, as has been pointed out by Dr. B. S. Guha, there is not one uniform type of this Mediterranean race in India, rather a number of closely graded types. This group was probably differentiated in the Southern steppes of Northern Africa and the adjoining Asiatic mainland, and at the close of the Ice Age, drifted both westwards and eastwards. We can distinguish three distinct types of this race in India of which, according to Dr. Guha, the first and the most ancient one closely resembles the Proto-Egyptian type and may be called "Palae-Mediterranean". This earliest Mediterranean type retains some of the Negroid traits. It is the prevalent type among the human skeletons found in burial jars at Aditanallur and in the cairns of Deccan, belonging probably to the beginning of the Christian era. It is likely however, says Dr. Guha, that it arrived much earlier and introduced the megalithic culture in late Neolithic times and subsequently dispersed towards the South to form the dominant type among the Dravidian-speaking peoples.⁹⁶ The diffusion of Megalithic culture-traits in Central and North-East India, in course of the drift of the Palae-Mediterraneans from North to South, and their gradual assimilation by the older Proto-Australoids, does not seem, therefore, unlikely.

25. ARCHITECTURAL AND SOCIOLOGICAL ASPECTS OF MEGALITHIC CULTURE IN INDIA

For our purpose, that is, from the point of view of the religious architecture in India, the following 'traits' of Megalithic culture may be isolated:

(i) Smaśān-diris or burial stones and mounds of earth, surrounded by a fence of wood or stone.

- (ii) Funeral huts of circular and conical type (Toda dairy) within stone-circle.
- (iii) Monoliths or Menhirs with stone-circles.
- (iv) Cromlechs or stone-circles.
- (v) Dolmens: A series of orthostatic blocks of stone set up on edges, roofed with horizontal slabs laid across the tops or the uprights.

Architecturally speaking, these are the most important traits of Megalithic culture in India and these burial structures, it must be noted, are all associated with religious rites. The most significant thing here is the 'sepulchral circle'." The 'circle' plays a considerable part in the religious architecture of India and we must not forget that India is a classic land for the translation of wood into stone.

Sociologically speaking, the Megalithic culture-complex in India is positively correlated with the rank and status of persons, the size and structure of the memorials being dictated by the ranks and status of the dead. The tribal chiefs, heroes and village headmen, were already emerging into the status of gods and their memorials were evolving into shrines in Megalithic India.

26. ŚMAŚĀNA AND STŪPA

Now we are in a position to indicate roughly the origin and evolution of devālayas or temples in India. From the pre-historic sites of Baluchistan, Sind and Indus Valley, not a single structure of shrine or temple has yet been unearthed. In the absence of any such shrine or temple we cannot say what exactly the Pre-Arayan model of Devālaya was which the Aryans might have adopted for their purpose. Archaeologically we are still in the dark about this. Ethnologically, we can at least try to reconstruct a more or less consistent history of the devālayas from the data already collected and collated briefly above.

As the Aryans were battling forward along the Ganges valley towards the East, towards the Vindhyas, and across the Vindhyas towards the South, they were surely passing through the Smaśāns of the Pre-Aryan Niśāda-Sabaras and Dāsa-dasyus and witnessing the burial mounds, monoliths,

cromlechs and dolmens, erected by them in memory of their tribal chiefs, heroes and headmen. The idea of erecting some such memorials for their own tribal chiefs, heroes and headmen, might have dawned on the Vedic Aryans as they were practising both burial and cremation customs. They might have erected such structures, at least the mounds and the funeral huts, enclosed within fences of wood and stone. It is interesting to note that the Sanskrit word *Smaśāna* perhaps etymologically means "stone seat"—"Sman Sayana" (Yāska) meaning "couch for body", "asman sayan" (Weber) meaning "stone couch". In the Satapatha Brāhmana we read: "The Gods drove out the Asuras, their rivals and enemies, from the regions, and being regionless, they were overcome, wherefore the people who are godly make their burial places four-cornered, while those who are of Asura nature, the Eastern and others, (make them) round for they (the Gods) drove them out from the regions." This is significant because it shows that the Aryans, while adopting the mound and the fence from the Pre-Aryans, were probably trying to introduce a rectangular type of fence instead of a circular one, to differentiate their superior status from the enslaved Pre-Arvans.

In the Jātakas we have several references to thupas (stūpas) or earth-mounds, built upon the remains of the dead." The Sujātā Jātaka relates that a landowner from the day of his father's death was filled with sorrow and carrying his bones from the place of cremation, he erected an earth-mound or mattikathupa in his pleasure-garden, where he visited from time to time, adorned the tope with flowers and lamented. Another Jātaka gives an interesting account in much more details, of the obsequies of a king. The ministers made a funeral pyre with a hundred wagon loads of wood. On the spot where the body was burnt, a chetiya or shrine was erected and honoured for seven days. The burnt skull (Sisakapālam) inlaid with gold was put at the king's gate, raised on the spear-like staff serving as royal insignia and was honoured. It is therefore clear that the Pre-Aryan burial-mounds were not only adopted by the Vedic Aryans to serve as memorials for their chiefs and heroes, but before the advent of Buddha, at least in his life-time, the memorials of the kings and the rising landed aristocracy were also built in the model of the mound, and some of these mattikathupas and chetiyas were developing into 'shrines'. And, after Buddha's death, his ashes rose the giant stūnas.

When we come to Asoka, the greatest builder of Buddhist India and perhaps the first translator of wood into stone, we find that he erected a vast number of stūpas to enshrine the relics of Buddha and Buddhist saints. He also adopted the circular type of fence to enclose the stupa. The most famous of these is the great stupa at Sanchi, near the ancient city of Vidiśa. Here the original mattikathupa or earth mound has subsequently been encased in sandstone blocks, while a circular stone railing replacing a wooden original and still later four highly decorated gateways, have been added. The Sānchi stūpa was also enlarged to nearly twice its previous size and the crest of the dome was surmounted by a superstructure consisting of a square railing enclosing a pedestal which supported the shaft of a triple umbrella. The umbrella is the symbol of royalty. The Barhut stupa. about a hundred miles from Allahabad, and the Amaravatī stūpa in the South, have similar architectural features. The massive stone-railings are really the wonders of Buddhist India. If this railing constitutes one of the most significant features of Buddhist art and architecture, it must be admitted that it has been entirely derived from the Megalithic substratum of Pre-Aryan India, that is, from the stone-circles of primitive Smaśans.

Asoka's pillars are huge tapering monoliths of hard sandstone, forty or fifty feet in height. These stone pillars were erected and distributed over a wide area with edicts inscribed on them. It has been suggested by some scholars that it was from Iran that Asoka borrowed his sermons in stone and that Asoka's columns with their bell-capitals show clearly their "Persepolitan origin". But it seems that if there is any such origin at all, it is because both the Iranian and the Indian monoliths have been ultimately derived from their original home (if there was any "single home" of origin at all) of Megalithic culture-complex—the East Mediterranean zone. And it was not from Iran, but possibly from the monoliths of the primitive burial-grounds of India, that Asoka derived his inspiration, probably during his dharma-yātrās or "tours of morality", for erecting the massive monoliths to propagate his religious sermons. It is significant that the Asokan monoliths are mainly concentrated in the North-East and Central India, round about the Megalithic culture-regions.

The beginning of the Caitya hall is to be traced at the rock-cut chambers of the Asokan period in Barabar Hills, few miles north of Bihar, of which the Lomas Rishi and Sudama caves are most notable, their

interiors being very similar. Inside is a barrel-vaulted hall just like a Toda hut and at the end is a separate circular cell with a domed roof. The cell has an overhanging eave outside like a thatch. It is an exact lithic copy of circular or beehive type of hut. Two other instances of this type preserved in widely separated areas may be seen, one in a rock-cut chamber at Guntupall in the Kistna district of Madras Presidency and another at Kondivte near Bombay. Both are later than those in Barabar Hills, but are exact copies of circular huts with conical thatched roofs resting on a framework of wood. Structural examples of this type appear to have been built at Taxila about the 1st century B.C., of which the temple at Sirkap is an illustration.¹⁰⁰

The circular and beehive type is also the predominant type of hut represented in the sculpture of Sanchi and Barhut pillars. These basreliefs represent mainly two types of huts—(i) small domed huts used as residence by holy men and (ii) huts with semi-circular gable. In a bas-relief on the inner face of the left pillar of the eastern gateway of Sanchi are represented a fire chapel with a domed roof and simple leaf hut with a circular dome. In a bas-relief in a panel of a corner pillar of the ground railing of Barhut stupa, there is a building labelled "suddhamma devasabha" which looks like a regular temple. This temple-like building has a twostoried domed roof modelled on the dome of huts. Whereas the dome of the huts as a rule, is in four sections the spire of the building is circular. These domed huts, says Chanda, may be the simplest type of kūtāgāra referred to in the Pali texts. The method of its construction appears to be a favourite simile with the authors of the Nikāyas. Thus in the Samvutta Nikāva it is said: "Just as in a peaked house, brethren, whatever rafters there are all converge to the roof peak, resort equally to the roof peak, are fixed together in the roof peak, all go to junction there, even so whatever wrong states there are all have their roof in ignorance, all may be referred to ignorance, all are fixed together in ignorance, all go to junction there". This kūtāgāra or domed hut was also one of the five kinds of dwellings which Buddha allowed his monks to live in.101

27. THE "CIRCULAR FORM" IN THE RELIGIOUS ARCHITECTURE OF INDIA

The "circular form" is one of the most important and basic 'forms' in the religious architecture of India. But 'form' itself, in all Arts including

Architecture, is totally meaningless if it is not viewed in proper relation to its 'content' or 'funcion'. There is no doubt that the "circular form" was functionally related to the dwelling house of man in India in the beginning. It is difficult, if not impossible, to locate its origin in India or elsewhere, and also to study its elaborations, diffusion and range of distribution in India. That is not exactly my task here. Without diverging into these details, it may be pointed out here that it may still be found as a dwelling house-type in some regions of India, for example in some parts of Andhra and among the Chenchus of Hyderabad. But that does not preclude the possibility of its falling into disuse as a 'collective' and 'individual' dwelling house-type among a larger section of people distributed over far wider regions in India. We cannot, of course, say that practical utility or economic motivation alone was invariably determinative in the partial disappearance of this 'circular form' as a dwelling house-type in India. In fact, particular societies do at times undergo genuine losses of specific 'items' of their culture, owing to a variety of causes, such as environment, economy, loss of materials or skills, shrinkage of population and other known and unknown factors. In 1912, Dr. Rivers demonstrated a series of convincing examples of such disappearance of useful arts in Oceania, arts of unquestionable utility such as canoes, pots and bows. A particular house-type is certainly a useful art and the partial disappearance of the circular type as a dwelling house in India might be ascribed to a variety of causes. But this circular type was also adopted and specialised for the construction of 'special houses', associated with magicoreligious function, such as the Toda dairies, the Muria 'ghotuls', the Manbhum 'harisabhas' and the Bengali golās and ghāni-ghars. The circular house-type which was once embedded as a purely material 'trait' in some particular culture-pattern, was interwoven as a magico-religious trait with some other or later culture-patterns in India.

The "circular form" also rises from the primitive burial grounds of India as a significant form, associated with the same magico-religious function. The śmaśān 'moulds' become mattikathupas and these thupas or earth-mounds naturally assume circular or domed shape in course of time. Thus one and the same "circular form", arising from both the Land of the Living and the Land of the Dead in India, merges into a mighty form and intensifies the magico-religious function. After this merging and heightening of the religious function, it becomes understandable why

this basic circular form, with its subsequent elaborations, was made to crown the spires of temples in South India (Dravidadeśa).

References*

- 1. Gordon Childe V.; The Story of Tools: Pp. 2-3. Prof. Gordon Childe mentions that Efimenko. the leading prehistorian in U. S. S. R., has suggested that this standardisation and differentiation of tools reflects a division of labour between sexes in Middle Palaeolithic society.
- Shapiro, Harry L.: Homes Around The World (The American Museum of Natural History).

 Science Guide No. 124.
 - 3. Zuckermann: The Social Life of Monkeys and Apes: Chapters on Mammalian Sociology.
 - 4. Gordon Childe, V.: Progress and Archaeology: Chap. IV. pp. 44-56.
 - 5. Seligmann, C. G. & B. Z.: The Veddas: Chap. IV. pp. 86-88.
- 6. The importance of man and of human culture in relation to the landscape has been the theme of several books, of which we may mention as outstanding, T. Griffith Taylor's Environment and Nation (1936), E. Huntingdon's Mainsprings of Civilisation (1945), J. Brunhes' Human Geography & P. W. Bryan's Man's Adaptation of Nature—Studies of the Cultural Landscape. An excellent account of the subject will be found in Chapple & Coon's Principles of Anthropology and C. D. Forde's Habitat, Economy and Society. Dr. J. M. Mogey's little book The Study of Geography is also very useful and interesting.
- 7. For an account of the vegetation in different regions of India I have mainly depended upon C. C. Calder's article An Outline of the Vegetation in India in the Indian Science Congress Symposium An outline of the Field Sciences of India.
 - 8. Hutton J. H.: The Angami Nagas, Chap. II.
 - 9. Hutton, J. H.: The Sema Nagas, Chap. II.
 - 10. Mills, J. P.: The Ao Nagas, Chap. II.
 Smith, W. C.: The Ao Naga Tribe of Assam, Chap. III.
 - 11. Mills, J. P.: The Lhota Nagas, Part II.
 - 12. Mills, J. P.: The Rengma Nagas, Part II.
- 18. Hutton, J. H.: The Sema Nagas, Appendix V. In a paper read before the Oxford Anthropological Society in 1919, Hutton drew attention to this point while criticising Perry's observation that in the Naga Hills area "the materials used for building probably do not depend on local conditions".
 - 14. The Sema Nagas: p. 34, Ft. 2.
 - 15. Mills, J. P.: Op. Cit.
 - 16. Hutton, J. H.: Op. Cit.
 - 17. Mills and Hutton: Op. Cit.
 - 18. Playfair, A.: The Garos.
 - 19. Roy, S. C.: The Birhors.

^{*}Where scattered informations have been pieced together, it has not been possible to refer to chapters or pages, but to texts and sources only.

- 20. Roy, S. C.: The Mundas and their Country: pp. 382-390.
- 21. Roy, S. C.: The Oraons of Chotanagpur: pp. 64-65.
- 22. Roy, S. C.: The Khāriās, Vol. I, Chap. V.
- 23. Bodding, P. O.: How the Santhals Live (Part III of Studies in Santhal Medicine and connected folklore).
- 24. Russell & Hiralal: The Tribes and Castes of the Central Provinces of India (1916)-Vol. III, pp. 121-123.
 - 25. Haimendorf, C. V. F.: The Chenchus. Chap. I.
 - 26. Op. Cit.: Chap. VI.
 - 27. Op. Cit.: Chap. V, pp. 47-48.
 - 28. Ibid.: p. 49.
 - 29. Op. Cit: Chap. 31, pp. 300-301.
 - 30. Rivers, W. H. R.: The Todas: Chap. II.
 - 31. Seligmanns: The Veddas: p. 37.
 - 32. Ibid.: Pp. 37-56.
 - 33. Pant, S. D.: The Social Economy of the Himalayans, Chap. II, p. 41.
 - 34. Op. Cit.: Chap. III, p. 52.
 - 35. Shapiro: Op. Cit., p. 24.
 - 86. Lips, T. E.: The Origin of Things: Chap. I.
 - 87. Shapiro: Op. Cit., p. 24.
 - 88. Ibid., p. 24.
 - 39. Ibid., p. 24.
 - 40. Shapiro: Op. Cit., p. 5.
 - 41. Ibid., p. 5.
 - 42. Herskovits, M. J.: Man and His Works: Pp. 254-255.
 - 43. De Terra & Paterson: Studies on the Ice Age in India and Associated Human Cultures (1939). Krishnaswamy, V. D.: "Stone Age India" in Ancient India-3.
 - Chakravartti, S. N.: "An outline of the Stone Age in India" in J. R. A. S. B., Vol. X, 1944
- 44. Guha, B. S.: "Progress of Anthropology in India" in the Progress of Science in India (1988).

 Guha, B. S.: "An Outline of Racial Ethnology of India" in An Outline of the Field Sciences of India.
 - 45. Grierson: Bihar Peasant Life.
 - 46. Brown, A. R.: The Andaman Islanders, Chap. I.
 - 47. Guha, B. S.: Racial Elements in the Population, Oxford Pamphlet 22.
 - 48. Elwin, Verrier: The Muria and their Ghotul, Part II, Chaps. 10, 11, pp. 326-351.
 - 49. Rivers, W. H. R.: The Todas, Chap. III.
 - 50. Ibid.: Pp. 43-45.
 - 51. Brown, A. R.: Op. Cit., pp. 31-82.
 - 52. Rivers: Op. Cit., Chap. III.
 - 53. Seligmann: Op. Cit., p. 49.

- 54. Haimendorf: Op. Cit., Chap. V, p. 48.
- 55. Haimendorf: Op. Cit., Chap. XXXI, p. 301.
- 56. Gulam Ahmad Khan's report, published as an appendix to the Hyderabad Census Report, 1931; a short anthropological analysis by Dr. B. S. Guha in Census of India, 1981, Vol. XXIII, Part I; J. H. Hutton in Census of India, 1931, Vol. I, Part IIIB.

See also the "Introduction" of Haimendorf's The Chenchus.

- 57. Haimendorf: Op. Cit., Intro.
- 58. Gillin & Gillin: Cultural Sociology (1948), pp. 258-288. Here an interesting account of the emergence and development of village has been given from sociological point of view.

Rivers: Op. Cit., Chap. II, pp. 23-31.

- 59. Brown, A. R.: Op. Cit., Chap. I.
- 60. Gordon Childe, V.: What Happened in History; Chap. III. Gordon Childe, V.: Progress and Archaeology; Chap. IV.
- 61. Piggott, S.: Prehistoric India: Chaps. III & IV.

Wheeler, R. E. M.: Five Thousand Years of Pakistan (Lond. 1950).

- 62. Gordon Childe, V.: What Happened in History (1948): Chap. III, p. 59.
- 63. Roy, S. C.: The Birhors.
- 64. Seligmanns: Op. Cit., Chaps III & IV.
- 65. Bandyopadhyaya, N.: Economic Life and Progress in Ancient India, Vol. I (2nd ed.), Book II, Chap. I, pp. 97-124.

Mookerji, R. K.: Indian Land System, Part I, pp. 1-4.

- 66. Mookerji, R. K.: Ibid.
- 67. Tentatively drawn from scattered references in Rigueda and Vedic Index.
- 68. Mehta, R. N.: Pre-Buddhist India, Sec. III, Chap. I.
- 69. Mehta, R. N.: Ibid.
- 70. Hutton, T. H.: Caste in India (1946): Chap. XII, pp. 158-160. Hutton says that "in the unadministered area to the east of the Naga Hills, where each village is an independent political unit, there is very often to be seen a distribution by villages of certain occupations. Thus some villages make pots but do not weave cloth; others weave, and others again are occupied principally with blacksmiths' work, the one village bartering its products with its neighbours, when not prevented by mutual hostilities, in spite of differences of language, customs and sometimes perhaps of race between one village and another. Here we have clearly an aspect of occupation distinctly suggestive of the caste system. .." It is interesting to note that in Malabar, separate words are employed to distinguish the dwelling houses of different classes and castes—such as the Matham of Brahmans, the Kottaram of Chieftains, the Kayikkal of high Kshatriyas, the Vider of Nayars and the Kudi of lower classes.
 - 71. Mehta: Op. Cit., Sec. II, Chap. VI, pp. 174-176.
 - 72. Shamasastry, R. (ed.) Kautilya's Arthasastra: Bk. II, Chaps. 1, 2.
 - 73. Acharya, P. K.: Indian Architecture according to Manasara-Silpasastra.
- 74. Gordon Childe, V.: What Happened in History: Chap. V. Progress and Archaeology: Chap. IV.
- 75. Lewis Mumford's The Culture of Cities, a remarkable study of the sociology of city and its culture, esp. Intro. & Chaps. I and VII.

- 76. Gordon Childe: Progress and Archaeology: Ibid.
- 77. Drawn from Mackay, Piggott and Wheeler's writings on the cities of Indus valley civilisation.
- 78. Wheeler: Ancient India, No. 2.
- 79. Agnipurāņa (Bengali Ed).
- 80. Mumford: Op Cit., Chap. VII, Secs. 1, 7, 10 & 11.
- 81. Brown, A. R.: Op. Cit.

Karsten, R.: Origins of Religion, Chap. X.

- 82. Roy: The Birhors.
- 88. Roy: The Mundas
- 84. Roy: The Kharias.
- 85. Roy: The Oraons.
- 86. Bodding: The Santhals.
- 87. Hutton & Mills: Studies on the Nagas.
- 88. Playfair: The Garos.
- 89. Gurdon: The Khasis.
- 90. Whitehead: Village gods of South India.
- 91. Roy: The Mundas.
- 92. Bodding: The Santhals.
- 93. Mitra, P.: Prehistoric India (2nd ed.): Chap. XV, pp. 340-341.
- 94. Collected from the studies on various tribes.
- 95. Gordon Childe: Ancient India, No. 4.
- 96. Guha, B. S.: Op. Cit., Ibid.
- 97. Gordon Childe: Op. Cit., Ibid.
- 98. Eggeling: Satapatha Brāhmaņa: Pp. 423-424.
- 99. Mehta: Op. Cit., Sec. IV, Chap. VI, pp. 319-320.
- 100. Brown, Percy: Indian Architecture (Buddhist & Hindu), Chap. III.
- 101. R. P. Chanda's article in Rūpam, No. 17, January 1924, on the "Beginning of the Sikhara of the Nāgara (Indo-Aryan) Temples".

BUDDHIST PARADISE CULTS IN SIXTH CENTURY CHINA*

by J. LEROY DAVIDSON

In order to reach an understanding of those attitudes in China during the sixth century which led to the election of specific texts to depict the Lotus Sūtra and associated gospels, it is profitable to analyze the iconography of the small and unified compositions carved on numerous stelae. It is even more rewarding to study the greater mass of material found in the huge complexes of the sixth century cave temples. The temple carvings add little to our iconographic knowledge but the sheer weight and repetition of their evidence make clear the changing stylistic factors that corresponded to equally significant psychological trends.

The most important of the sculptural sites during the first part of the sixth century were the Cave Temples of Lung Men near Loyang in Honan. These caves were begun in 495 shortly after the Northern Wei court was transferred from Ta T'ung. Although considerable work at Lung Men was carried on until the beginning of the eighth century, our immediate interest is limited to those caves which were sculptured during the first half of the sixth century.

It is obvious that the Lotus Sūtra maintained the importance manifested during the preceding quarter century at Yun Kang. The frequent appearance of the paired Buddhas. Sākvamuni and Prabhūtaratna, offers ample evidence of the devotion accorded that text. In addition, the motives of the Vimalakīrti Sūtra are abundant. In most instances the facing figures of Mañjuśrī and Vimalakīrti appear in spandrels above niches in which a Buddha sits with his hands in the same mudrās commonly shown while preaching the Lotus Sūtra. I am strongly inclined to belive that the Lotus teaching is implied in this combination, just as it was in some of the stelae where the figures of Mañjuśrī and Vimalakīrti were inextricably combined with specific representations of the Lotus.

The inscriptions in the Lung Men caves are plentiful in contrast to the paucity of written documentation in the Yun Kang complex. Here additional support is given to the belief in the importance of the Saddharma Punḍarīka at Loyang. It may be assumed from the number of dated ins-

criptions (as well as from stylistic evidence) that the first great outburst of creative activity at Lung Men occurred during the years 495 to 535. Most of the identified inscriptions refer to divinities which are prominent in the Lotus Sūtra.

Śākyamuni leads the list with forty-three references. Maitreya takes second position with thirty-five mentions. The Bodhisattva Avalokiteśvara (Kuan Yin) is in third place 'with nineteen inscriptions. Fewer references are made to other deities: Amitayus Buddha (Wu Liang Shou) receives eight; Prabhūtaratna three and Bhaiṣajyaguru Buddha (Yao Shih), only one. Other inscriptions refer to the seven Buddhas of the past, the fifty-three Buddhas, and the thousand Buddhas.

It is significant that most of these deities are among the leading dramatis personae of the Lotus Sūtra. While each of them appears in other texts, and many have whole sūtras devoted to themselves, nevertheless the complex implies an allusion to the Lotus. It may be that the devotee as well as the sculptor referred to the Amitayur-Dhyana Sūtra in which Amitayus is the central figure, to one of the Maitreva sūtras. or to lesser known sūtras. Yet each of these sūtras would inevitably recall the Lotus as the mother of all such Mahāyāna texts. Amitayus is accorded only passing mention in the Lotus where he is listed as one of sixteen Buddhas and is named as the Lord of the paradise in the west.' But it seems certain that it was the prestige of the reference in the Lotus that validated the selection of Amitavus as the saviour in the Western Heaven. When, at the end of the sixth century, the cult of the Pure Land became dominant, The Lord of Sukhāvatī, the Western Paradise, was referred to chiefly under the name of Amida or Amitabha (O Mi To), rather than under the epithet of Amitayus (Wu Liang Shou). Maitreya also lost his relative importance with the ascendancy of Amitābha Buddhism.

The inscriptions of the period demonstrate how Buddhism was rapidly becoming sinicized and explain the widespread appeal of Buddhism to the Chinese. Dedication after dedication states how the donor commissioned a sculpture so that he and his parents may be reborn in the Paradise of either Amitayus or Maitreya. Not only does the filial piety so basic to Chinese society find expression in Buddhism, but the practical point of view inherent in Confucian traditions creeps into Buddhist thinking. No longer do we have the Indian desire for mingling in a mystical Nirvāṇa, neither the emphasis on the crude magic of the earlier missionaries, nor hair-splitting by

subtle dialecticians. The goal of the Chinese was now neither so lofty nor so low. His new aims were the material delights and security of the Eastern and Western Paradises and these were to be obtained by faith and works. Both these means are stressed in the Lotus Sūtra. The believer needed only to develop as he wished that element which offered him the greatest satisfaction. Earlier the appeal to mysticism had been expressed in the elaboration of multitudinous images in the archaic reserve of the Yun Kang caves, the appeal to magic in the resurrection of Prabhūtaratna, and the seductive propaganda in the charm of Vimalakīrti. Now the hope for rebirth in the paradise supplanted the desire for a mystic union in Nirvāṇa.

That the Amitāyur-Dhyāna Sūtra became the first focus of attention for the devotees of the Pure Land Paradise is significant to this study. For the Amitayus sūtra is conceived as if it were a supplement to the Lotus Sūtra. Although the Lotus Sūtra gives only passing mention to the Buddha Amitayus, the paradises of other Buddhas are described in great detail. By keeping the precepts of the Lotus the worshipper can attain to such a paradise. In the Amitāyur-Dhyāna Sūtra instruction is given through the legend of Queen Vaidehī on one method of attaining rebirth in the Pure Land of Amitayus. That method is meditation (Dhyāna in Sanskrit, Ch'an in Chinese). The Amitayus sūtra prescribed sixteen different meditations in a sequence which lead to the believer's visualization of the Buddha in his paradise.

Such a doctrine is merely a supplement to the Lotus and from the combination of inscriptions and iconography at Lung Men, it is obvious that the interest in the Amitayus sūtra derived not in contradiction to the Lotus teaching but as an aid toward carrying out the more general directions in regard to certain injunctions of the more comprehensive Saddharma Puṇḍarīka.¹² At the end of the sixth century, new conditions caused the Amitāyur-Dhyāna Sūtra to be supplanted by other Pure Land sūtras and the worship of Amitayus was carried on under his other designation of Amitābha.

During the sixth century the growing interest in the material benefits within the paradises can be detected through subtle manifestations in the art of the first half of this century. The early figures at Lung Men have been considered by many to be the supreme achievement of the Chinese sculptor. In the beauty of their flowing lines and elongated stylizations they have been

properly compared with the magnificent reliefs of Autun, Vezelay and Moissac. But at Lung Men, despite the beauty which is obvious to the sophisticated western eye, close analysis betrays a sprouting materialism which eventually was to bear a sterile seed.

The formula at Yun Kang, which brought the Indian traditions of Central Asia into synthesis with the calligraphic mode of China, still persisted. But the struggle of the craftsman to unite the two opposing styles—a struggle that parallels the sinicization of Buddhism—is absent. Just as Buddhism now offered the easy road to the Sukhāvatī Paradise, so the sculptor accepted a simple formula based on the archaic idealism of the preceding century. Although the basic formula is present, the spirit has been recast. The same sharp planes delineate the features. In fact, the planes are often sharper than those at Yun Kang. Drapery is defined in clearer, tighter lines and more jagged outlines. Both bodies and faces are elongated and reflect the grace of the sweeping outline. The mouth has become sweeter and even more consciously archaic than the true archaic smiles worn by earlier prototypes. Elegance rather than power is the order of the day.¹³ If an archaic art may be regarded as mannerist in the sense that Bronzino and Pontormo are mannerists, then we might say that the style of the early Lung Men caves is mannerist.

The appeal that these sculptures must have made to the sixth century Chinese is still evident to the contemporary observer. The assurance of skill manifest in the sharp cutting, the mood evoked by the gentle smile, the satisfaction created by the drapery lines and figural tensions, are all permanent qualities that place these stones among the highest achievements of human artistry. Although they perfectly convey the spirit of contemporaneous Buddhism, it must be realized that that form of Buddhism was already beginning to suffer from a slow sweet poison administered as a tempting narcotic to win mass support.

The lure of the easy road to the Sukhāvatī or the Tusita Paradise could have burgeoned for the masses of the faithful only toward the end of the sixth and the beginning of the seventh century. Nevertheless the weight of epigraphical evidence in the sixth century confirms the stylistic change. Austerity was being superseded by sweetness, power by elegance. The comprehensive Lotus Sūtra had within it, as the Buddha had said, all things for all people. As the personality of Vimalakīrti was needed to attract the

literati so were the Pure Land Sūtras developed to supply a simple hope for the millions, rich or poor. The theme was found within the Lotus, then isolated and amplified by the Pure Land sects.

Although Amitābha Buddhism was to dominate China for the next two centuries, the Lotus Sūtra was still to be regarded as a basic and comprehensive doctrine, not opposing but supporting the Pure Land doctrine. Every concept in the Pure Land sūtras can be found in the Lotus. It is the emphasis that is different. The all-embracing doctrine of the Lotus that united the three vehicles into one and established Sākyamuni as omniscient, omnipotent, and timeless is not contradicted.

Professor Zenryu Tsukamoto has noted in his essay on Lung Men Buddhism that Śākyamuni is frequently shown flanked by two Bodhisattvas and two śrāvakas (disciples). This formula is also common to many stelae of the period. Tsukamoto interprets this representation as a visualization of one of the prime philosophic tenets of the Lotus Sūtra, namely, that despite the differences between Hīnayāna and Mahāyāna Buddhism there is only one supreme truth.¹⁴

"...one has to understand how the Tathagata by an able device and direction shows but one vehicle, the great vehicle." 15

Tsukamoto's observation may be amplified by a glance at some other Buddha groups which include not only the Bodhisattvas representing the Mahāyāna and the disciples representing Hīnayāna, but a third pair of figures wearing conical caps. These individuals are Pratyeka Buddhas who represent the middle vehicle, once more united by the Lotus teaching in the Ekayāna, the single vehicle.

Though the teaching of the Lotus was still to dominate Chinese Buddhist thought for a century, it was a thought that was to derive less and less directly from the Lotus and more from the Amida sūtras with their emphasis on rebirth in the Western Paradise.

The sauve character of Lung Men sculpture is paralleled by individual dated statues which mark in their chronological sequence the progressive humanization of the deities as the mundane benefits of the Western Heaven absorbed the thinking of the Chinese Buddhist. The early Lung Men style is clearly reflected in the superb Sākyamuni and Prabhūtaratna of 518 in the Guimet Museum, Paris. Rightly considered one of the masterpieces of Chinese sculpture, this small bronze reflects the early Lung Men style with

its sharply exaggerated drapery stylizations, the consciously archaic planes of the cheeks, and the elegantly attenuated bodies. All the true archaic details are present. It is only in the too complete mastery of the rendering. in the ever so slight bravura of the swinging drapery that one senses the new direction. Within twenty years the trend was well established and clearly defined. In the von der Heydt stele of 536 there is no longer doubt as to the direction Buddhist sculpture was to take. The fragmentary remains of Vimalakīrti and Mañjuśrī on the reverse of the stone provide a secondary basis for considering the Buddha group on the front as a representation of the Lotus Sūtra. The Buddha in the centre flanked by a Bodhisattva disciple, and a guardian also conforms to Nagahiro's recognition of the iconography of the Lotus. It is the style rather than the iconography which now attracts us. Qualitatively this stone, like the Guimet bronze, is a masterpiece of an epoch. But in the eighteen years intervening between these two landmarks the trend which became recognizable in the comparison between the Yun Kang and Lung Men carvings has now become obvious. Only traces remain of the archaic planes of the cheeks which have been transformed into rounded curves. The petite mouth still smiles, but it is closer to the sweetness of a human smile. The drapery has undergone an equally conclusive metamorphosis. The stylized folds have lost their jagged independence and sharp contours have been replaced by scalloped edges. The robe is still a design in stone and on stone, but the loosening of the folds shows a growing interest in rendering the visual appearance of the textile as cloth, as the rounding of the cheeks indicates the drive toward reproducing a human rather than transcendent beauty.

This evolution may be clarified by a stele formerly in the collection of C.T.Loo. Dated by an inscription of 527 this stone indicates the transition that was taking place at the end of the third decade of the sixth century. The front of the stele represents a standing Buddha, probably Sākyamuni, although similar representations of Maitreya as a Buddha are known. The figure was originally part of a trinity formed by a Boddhisattva at each side. The subsidiary figures which might have offered a more definite identification of the deity have been removed. A Buddha group appears at the top of the nimbus (back) and, in the central register below, the Mañjuśrī-Vimalakīrti scene. Once more it is likely that the subordinate Vimalakīrti story serves to identify the larger Mahāyāna and Lotus context. It is the subtle change

of style between this stone and both the earlier Guimet bronze and the later von der Heydt stele which illustrates the development that occurred decade by decade. The face of the Buddha, although somewhat broad, has all the archaic mannerisms of the first quarter of the century. The drapery, on the other hand, although still flaring out at the hem, has lost much of the tight angular formula and has been softened. The relief details over the legs have loosened into the rounded scalloped pattern that is to be seen completely developed in the von der Heydt stone made ten years later.

The trend which developed during the fourth decade of the century seems to have accelerated toward the middle of the century. The stele of 543 in the Gardiner Museum, Boston, shows a distinct change." The iconography (front) consists of a Buddha with disciples and Bodhisattvas at both sides. Our intimation that this represents Sākyamuni preaching the Lotus is confirmed by the typical mudrās and the representation of Sākyamuni and Prabhūtaratna (back).

The central Buddha on the front is by this time designed as a flattened cylinder. Almost all trace of the early flaring drapery has disappeared, and the intensity of the jagged folds has been replaced by a series of decorative and conventional curves. The faces become bland and simply modulated. The low relief of Sākyamuni and Prabhūtaratna on the reverse is, however, an example of even more altered style. Here for the first time in Chinese Buddhist sculpture drapery is rendered in a purely naturalistic manner. Soft folds conform to the contours of the figures and there is an impression of flesh under cloth rather than a single symbol for body and textile.

The dichotomy of style between the front and back of the stele requires explanation. A possible answer may be that the front was carved by the master who might be expected to represent the more conservative tradition, while the back, less conspicuous, was done by an assistant more strongly imbued with the new spirit. Actually the presence of two hands can be sensed on many stelae.

There is an alternative explanation which seems probable. The front is carved in high relief and derives, as we have seen, from Central Asia and ultimately from the amalgamation of the Gandhara and Mathura styles of India. The basic formula was recast by Chinese craftsmen, but all its development was based on the original inspiration. The Sākyamuni-Prabhūtaratna group, on the other hand, is so different that only iconographic details

recall its non-Chinese prototypes. The style of the flowing lines of the drapery seems to find its source in the calligraphic line of the Chinese brush. Unfortunately, Chinese paintings of the period are extremely rare, yet one example does remain. In cave 12°N at Tun Huang the same Buddha group is painted on the left wall.20 The date of 538-539 for the cave is almost contemporaneous with that of the Gardiner stele. In the Tun Huang cave we are presented with a similar phenomenon. The faces of the Buddhas relate in their thin construction to the Guimet bronze of 518, yet the loose handling and freedom of the drapery are almost identical with the figures on the Gardiner stele. The variation in style is even more marked when other Buddha groups in cave 120N are compared with the figures of Sakvamuni and Prabhūtaratna in the same cave.21 The former are translations from stone carving into paint. They are even somewhat retarded in style and, in a manner found almost two decades earlier in sculpture, great emphasis is given to the sweep of the flaring draperies. How can one account for this divergence in style between the paired Buddhas and the related figures? It seems likely that some well-known painter, a few years ahead of his contemporaries in style, had made a "picture" of the meeting of the two Buddhas; that the picture rapidly became famous, and that the imitations became models upon which the Gardiner and Tun Huang representations were based. Although there is no evidence to prove this hypothesis, some corroboration may be found in the story of at least one other scene. There is one design of a Buddhist subject, "Brushing the Elephant", which is known through many copies. This derives from Chang Seng-yu who lived during the first half of the sixth century.²² Copies of this painting differing only in details and quality are still being produced. In fact it might be said that no painting of this subject is known that does not betray to some extent the influence of Chang.

Let us assume that a metropolitan or advanced style, now lost, once existed. Although at times extant monuments may show what were prevailing trends (and a conservative tradition is to be expected in religious art), it is probable that some painters in certain centers of advanced culture anticipated the works of traditional and conservative craftsmen by at least a few years. One example of such work exists in the carvings on a controversial sarcophagus (William Rockhill Nelson Gallery of Art, Kansas City, Missouri) which is now generally accepted as an authentic work of the sixth

century. The landscapes on these stones are far more developed than those of any other known work of the period.

The converse holds true of the Wetzel stele in the Museum of Fine Arts, Boston. Although this stone was sculptured in 554, most details of carving, especially the loosely scalloped drapery, recall the manner of the fourth and fifth decades, rather than that of the second half of the century. This is particularly true of the representations of Sakyamuni and Prabhūtaratna. Here the protagonists have neither the easy position nor the flowing lines observable as of ten years earlier on the Gardiner stele. The figures which are directly frontal and the drapery which is rigid and slightly flaring at the bottom combine to produce an hieratic form. Yet this retarded manner is carried on with no diminution in quality. Indeed, the Wetzel stele is probably one of the finest examples of the stone carvers' work to survive from sixth century China. Some trace of the new spirit appears in the guardian lions in the register below the scene of Sakyamuni preaching the Lotus. The animal to the left is carved in the extremely low relief which derives from the indigenous art of Han China. The lion on the right is more deeply cut, more fluid in details, and thus more naturalistic in its general concept. Obviously two different hands are represented. One may suppose that an older master craftsman carved the main scenes and that an apprentice imbued with the newer spirit was given the chore of carving a minor element such as the lion.

The urge toward greater visual mimesis, supported by the philosophic emphasis on the delights and beauties of the Western Paradise, were combined during the latter half of the sixth century with greater elaboration of detail and more emphasis on surface elaboration.²⁴

The same stylistic elements are apparent in a homogeneous group of stelae which derives from the northern province of Chili. Both the character of these stones and a series of dated inscriptions which they provide make it possible to assign them to the third quarter of the sixth century. A rather high relief dominates the surface of these sculptures. The plane is also broken by large and small reticulations which were probably designed to enhance an already rich play of light and shade.

On one such stele, in the Cleveland Museum of Art, there are iconographic elements which deserve our attention. At the front of the stele, carved at the top and supported by six apsaras, is the stupa of

Prabhūtaratna. The seven Buddhas of the past, shown below the apsaras, repeat the curved form of the stele as do the apsaras. Below these is the central and most important group on the icon. A large Buddha with a disciple and Bodhisattva at each side has been sculptured against such large reticulations that the figures seem to be in full round. Actually there are other figures on the reverse of the sculpture. Below the Buddha crouch two protective lions treated in a sinuous Indianizing style far different from the archaic formulae used during the preceding fifty years. The front base of the stele is decorated in lower relief with worshippers, guardians and a censer; the back with minor nature "gods".

For us the major significance lies in the identification of the seated Buddha. Ordinarily when the stūpa of Prabhūtaratna is shown above, the Buddha represents Sākyamuni. The mudrās are the familiar abhaya and vara positions usually indicating the Lotus preaching. But one great change has occurred. The Buddha's legs are not crossed in the eastern position of meditation, but hang, crossed at the ankles in the so-called western manner. This position would be rare, if not unique, for the representation of Sākyamuni, but is the most common position to be assumed by his successor, Maitreya. The reverse of the stele, on the other hand, shows as the main figure a Buddha, probably Sākyamuni, flanked by two seated Buddhas. Above are three more seated Buddhas, evidently symbolizing those of the past, present and future.

The subordinate position of Sākyamuni in small size and on the back of the stele, contrasted with the representation of Maitreya on the front, links it iconographically with the same sculptures to which it has already been tied by stylistic criteria. The seated Bodhisattvas on either side of Sākyamuni are of special interest. They sit in a position of meditation. One arm is raised so that the index finger may touch the face. The other hand rests on the ankle which is crossed on the opposite thigh from which the leg hangs pendent. This is the position usually reserved to represent Sākyamuni's first meditation or Maitreya's meditation. This position is common in the group of Chili sculptures under consideration. It appears on several stelae illustrated by Siren, but becomes of special importance on a carving dated 565 in the collection of the Freer Gallery of Art. Here we find a formula to which the Chili craftsmen of the Northern Ch'i Dynasty seem particularly attracted. The Lotus as the

inspiration is indicated by the stupa, within which are two Buddhas, depicted at the top of the stele. The same source is further emphasized by a niche directly below, in which the figures of Sākyamuni and Prabhūtaratna symbolize the identical scene. The main figures, however, are just below and represent two Bodhisattvas in frontal position but with the same pendent legs as those on the Cleveland stele. One of the flanking attendants has been destroyed, but the remaining figure, whose head is somewhat mutilated, appears to be, not a minor divinity, but actually a Buddha. Similar representations of paired Bodhisattvas as the main motive occur on other stelae and their attempted identification has occasioned considerable speculation. A reasonable explanation is that of Dr. Ussher Coolidge, who believes that the two Bodhisattvas represent Sākyamuni and Maitreya." Since the life of every Buddha in his incarnation on earth before his parinirvāṇa is supposed to be identical with that of all previous earthly Buddhas, Maitreya's life will include the same incidents that Sakyamuni's last existence comprehended. There are, however, some sixth century inscriptions which record the dedications of two statues to Maitreya. Thus the question as to whether the figures on the Chili stones represent Maitreya twice, or Maitreya and Śākyamuni, remains unanswered. In either case Maitreya has acquired major importance. The Museum of Fine Arts, Boston, owns a stone belonging to the group under discussion. The conventional stupa that appears at the top of this stele symbolizes the Lotus. Below the stupa a Bodhisattva sits between a pair of disciples and Pratveka Buddhas. position is identical with that of the Boddhisattva on the Freer stele of 565. Although in this instance the divinity could be either Sakyamuni or Maitreya, the latter seems more likely. If we accept this analysis it becomes obvious that in this group of sculptures the earlier relationship of Maitreya to Sakyamuni is changing. In the stelae with the paired and parallel figures there are two Buddhas of equal importance. In the related Cleveland stele Maitreya dominates Sākyamuni by his greater size and his position on the front of the stone. More and more the earthly Buddha recedes from the popular mind as the immediate saviour and in his place appear the Buddhas of the Tusita and Western Paradises, Maitreya and Amitābha. The Chili marbles with their emphasis on the Lotus indicate that the Maitreya form of pietism enjoyed a local supremacy during the third quarter of the sixth

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century. Although the worship of Śākyamuni or Maitreya always maintained a hold on the Chinese Buddhist, existing monuments indicate the overwhelming interest in Amitābha Buddha toward the end of the century.²⁴

During this period the *Lotus* remained a prime religious and philosophical document, but if the teachers gave their intellect to the *Lotus*, it was to the Sukhāvatī sūtras that the people gave their hearts.

LIST OF ABBREVIATIONS

Buddhist Mahāyāna Texts

Müller, F. Max (ed.), Buddhist Mahāyāna Texts, Oxford, 1894 (Sacred Books of the East, XLIX).

Fernald

Fernald, Helen, "An Early Chinese Sculptured Stela of 575 A.D.", Eastern Art, III, 1931, pp. 73-111.

Grottes

Pelliot, Paul, Les Grottes de Touen-houang: Peintures et Sculptures bouddhiques des Epoques des Wei, des Tang, et des Song, Paris, 1914-24. 6 vols.

Kern

Kern, Hendrik (trans.), The Saddharma-pundarîka or the Lotus of the True Law, Oxford, 1884 (Sacred Books of the East, XXI).

Mission

Chavannes, Edouard, Mission archéologique dans la Chine Septentrionale, Paris, 1909-1915. 2 vols. text, 2 vols pls.

Siren

Siren, Osvald, Chinese Sculpture from the Fifth to the Fourteenth Century, London, 1925. 4 vols.

Taisho

Takakuso and Watanabe (eds.), Taisho Daizokyo, Tokyo, 1924-29. 85 vols. and 15 vols. of the "Picture Canon."

^{*}The article is an extract from a forthcoming book on the Lotus Sūtra (Saddharma-Pnndarīka) as it appears in Chinese art. Preceding chapters discuss the historical and cultural background of Buddhist China and the implications of the iconography used during the early periods of Chinese Buddhism.

¹ Mission, Pt. 1, Pls. CLXI-CCLXIV; Siren, II, Pls. 75-91. The most important recent publication is that of Mid(z) uno, S., and Nagahiro, T.: A study of the Buddhast Cave-temples of Lung-men.

Ho-nan, Tokyo 1941 (cited below as Nagahiro). A useful appendix by Zenryu Tsukamoto on Northern Wei Buddhism is included.

- ² Nagahiro. p. 1.
- ⁸ E. g. Mission, Pt. 1, Pls. CXCV, CXCI, CCXXVI.
- 4a. E. g. Ibid., Pt. 1, Pls. CCXXXIII-CCXL.
- ⁴b. Davidson, J. Leroy, Traces of Buddhist Evangelism in Early Chinese Art", Artibus Asiae, XI, 4, 1948, pp. 251-265.
- ⁵ Nagahiro, chart. p. 449.
- 6 Idem.
- ⁷ Translated by Takakusu, J.: Buddhist Mahāyāna Texts, Oxford, 1894, pp. 161-201 (Sacred Books of the East, XLIX).
- 8 E. g. Taisho, nos, 453, 454, 456.
- 9 Kern, pp. 178, 389.
- 10 For this and the following cf. Mission, Text 1, Pt. II, p. 389 ff. Cf. no. 251, p. 416. Dated 528, this inscription ordered by a monk and his younger brother dedicates a statue to Maitreya in order that the souls of their parents may be reborn "under the dragon flower tree" (i.e. the Maitreya Paradise) where they may be reunited.
- 11 Buddhist Mahayana Texts, op. cit., p. 161 ff. Cf. p. 159, note 35.
- ¹² Many stelae combine the symbols of the Lotus with those of the Amida sūtras. Cf. the Philadelphia stelae of 575, Fernald, op. cit.
- ¹³ Cl mission, Pt. I. P. 1 ClXI ff; Siren, II. Pl. 75 ff.
- 11 Nagahiro, p. 15.
- 15 Kern. p. 82.
- 16 Mizuno, S., Chinese Stone Sculpture, Tokyo, 1950, p. 19.
- 17 Siren, II, Pl. 176.
- 18 Ibid., II, Pls. 152-153.
- 19 Ibid., II, Pls. 180-181.
- 20 Grottes, IV, Pl. CCLVI.
- ²¹ Ibid., IV, Pl. CCLI; V, Pls. CCLVII-CCLX.
- ²² Cohn, William, Chinese Painting, New York, 1948, p. 35.
- ²³ Ibid., p. 38, fig. 8.
- 24 The same stylistic development is apparent in the large complexes of the caves of T'ien Lung Shan (Siren, III, Pls. 206-227); the caves of Hsiang T'ang Shan (Mizuno and Nagahiro, The Buddhist Cavetemples of Hsiang-t'ang-ssu, Kyoto, 1937); the Pennsylvania stele (Fernald, op cit.); and the Yale stele.
- 25 Siren, III, Pls. 243a-251.
- 26 Ibid., III, Pls. 244-247.
- ²⁷ In a paper given at a symposium held at the Frick Collection, New York, February, 1949.
- 28 Nagahiro, chart, p. 449.



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